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FINANCING THE WESTERN CATTLE INDUSTRY

WITH SPECIAL REFERENCE TO COLORADO

BY

CHARLES ISEARD BRAY

B.S.A. University of Toronto, 1904.

M.S. Mississippi A. & M. College, 1907.

THESIS

SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF DOCTOR OF PHILOSOPHY IN ECONOMICS IN THE GRADUATE SCHOOL OF THE UNIVERSITY OF ILLINOIS, 1926

Reprinted from Colorado Experiment Station Bulletin 338, December, 1928

Financing the Western Cattleman.

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FOREWORD

The period from 1920 to 1925 was a serious one for western cattlemen, as well as for those who financed them. It was not surprising that during those years the problems of livestock financing held an important place among national legislative problems, or that bankers, legislators and agricultural leaders were alike concerned in the stockmen's financial welfare. President Roosevelt's Commission on Country Life[1] was one of the first groups to direct national attention to rural problems, including rural credit. The panic of 1907 had brought to light several defects in the national banking system and the investigations made in the following years resulted in the establishment of the Federal Reserve system in 1913, and in the development of the Federal Farm Loan system, established in 1916. These were two necessary steps in the direction of better credit facilities for agriculture.

From 1905 to 1915 the financial problems of the cattlemen do not appear to have been serious. But, altho cattle prices rose rapidly from 1916 to 1919, other prices rose higher in proportion. "Cattle paper" began to accumulate and by 1920 had reached unprecedented high totals. The deflation which followed was disastrous to both stockmen and bankers. Cattle values melted away and many stockmen became bankrupt.

After several years of depression, during which time many herds have been dispersed, the cattle business is again prosperous. It is in the hope of avoiding such violent fluctuations and losses in cattle financing that the following material is here presented.

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FINANCING THE WESTERN CATTLEMAN

By Chas. I. Bray

Development of the Cattle Industry.—Any study of the western cattle business may conveniently begin with the movement of the trail herds from Texas to Abilene, Kansas, in 1867. Tho this movement was not the beginning of the range-beef business it marked the beginning of a new era. The close of the Civil War in 1865 had released thousands of men to move into the largely unoccupied territory west of the Missouri. Four transcontinental railroads were in process of construction. The Union Pacific connected with the California Pacific in Utah in 1869, and the Santa Fe and the Southern Pacific were soon to be completed. The Northern Pacific reached Bismark, North Dakota, in 1873, when the railway panic put a temporary stop to its progress. These railroads formed the necessary connecting link between the cheap beef and abundant grass of the West and the rapidly growing industrial population of the East.

The packing business had received a great impetus during the Civil War, especially at Chicago, where the provisioning of the Union forces had furnished a start to numbers of early packers. The Union Stockyards had opened in Chicago[2] in 1865. Jacob Dold had built the first modern packing plant there in 1860, and Plankington and Armour followed in 1867. The year 1871 saw the refrigerator car in operation which was destined more than any other one factor to shift the packing center of America west to Lake Michigan and to the Missouri. In 1874 Wilson and Company, Chicago, began canning beef by modern methods. Modern refrigeration and meat canning meant more than improved methods of handling meat; they meant a year-round trade in fresh beef, and a market for American meat products in all parts of the world.

Two other factors which aided in the development of the western cattle business were the control of the Indians and the extermination of the buffalo. While much has been said against the destruction of the buffalo, the fact is that buffalo herds did not fit well into any system of modern farming and were a menace to crops and herds. Colonel Dodge estimated the slaughter of buffalo in the years 1872, 1873 and 1874, at 5,500,000 head.[3] This left the grass free for cattle, but unfortunately left the Indians without their former meat supply. It is not strange that they occasionally stole cattle or levied on the trail herds for steers. With the establish-

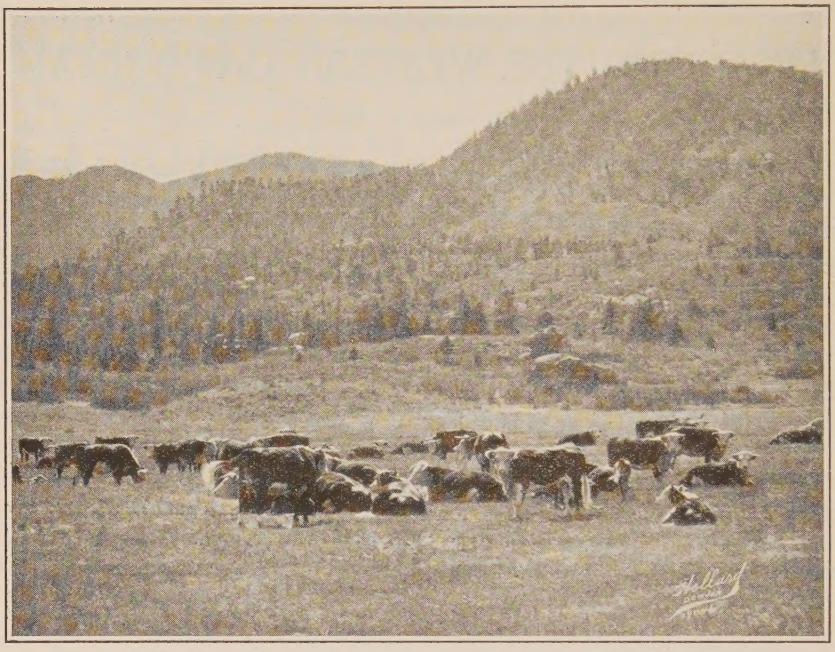

Fig. 1.—Modern Herefords in a Colorado mountain valley. Compare with the cattle in Fig. 2.

ment of the Indians on reservations in charge of Indian agents, the sale of beef to the Indians became a regular trade. The various army posts scattered thru the West formed another important market for beef.

In the days of ox trains, thin, footsore oxen were turned loose in the fall to shift for themselves on these western ranges. These oxen were often found fat in the spring, and the idea soon developed that Texas steers driven up into these plains could be fattened commercially to good advantage.[4] Bancroft writes:

> "The discovery of the nutritive grasses of the Platte valley in Colorado was made as early as 1858 when A. J. Williams, not having any food for his eighteen oxen during the winter, turned them out upon an island in the Platte near old Fort Lupton to take their chances of living or dying by starvation. To his surprise on visiting the island in the spring of 1859 he found them sleek and fat. Williams did not make use of this knowledge till 1866, when he drove 1500 Mexican cattle into the Platte valley, two other herds having preceded him the previous year from the Arkansas Valley."

St. Vrain and Bent had wintered Texas cattle in the Arkansas Valley as early as 1847.

The first herd brought to Denver from Texas was brought by John C. Dawson up the Arkansas to Pueblo, thence to Denver in 1859.[5]

During the Civil War, Texas cattle had increased rapidly in numbers with no market open for them. Prices fell to $4.00 and $6.00 a head, sometimes as low as $1.00 to $2.00. Jos. G. McCoy wrote that in Texas a man's poverty was measured by the number of cattle he owned.[6] Yet, while a good steer might be worth $5.00 in Texas it was worth possibly 10 times as much in New York. In the spring of 1866, after the reopening of the northern market to southern cattle, approximately 260,000 cattle crossed the Red River for the North. Serious outbreaks of Texas fever were started in northern herds by ticks carried in on these cattle. Such outbreaks aroused the stockmen of Kansas, Missouri and Illinois, and numbers of trail herds were turned back by armed mobs. Some drovers were killed and their herds confiscated, and others were forced to sell out at low prices. When in 1867 the Kansas Pacific reached Abilene, the way was again open to the northern and eastern markets. Jos. G. McCoy, an Illinois cattle feeder and business man, arranged with the railroad officials of the Kansas Pacific to put in stockyards at Abilene for loading western cattle.

McCoy's book, "The Cattle Trade of the West," is one of the best records of this early beginning of the western cattle business.

Fig. 2.—Government beef issued to Indians on the Rosebud Indian Agency in Dakota Territory, 1876. Courtesy of Fred Pennington, Deadwood, South Dakota.

Early Cattle Financing

It required little capital to start a herd in those early days. A young man might work several years for some cattleman, taking part of his wages in cattle which he could range with his employer's herd and brand with his own brand, prior to starting out for himself. Unbranded cattle or "mavericks" were numerous and a fast horse, a long rope and a branding iron helped to build many a herd.

In 1865 there were few banks in the West and no special financial machinery for handling cattle loans. From 1836 to 1864 there was in operation an unsatisfactory system of state banking; and the bank notes of that period were of uncertain value. The onset of the Civil War forced the adoption of a national banking system which was largely planned by Salmon P. Chase, then secretary of the treasury.

> "Local banks all issued paper money in amounts to suit themselves and the result was that a great deal of it was of questionable value and easily counterfeited. Banks of this kind (wild cat) were constantly failing and the counterfeiter was busy striving to duplicate the issue of responsible firms. To keep business men in touch with all this, what was known as a counterfeit detector was issued regularly. This was a folder about the size of an old-fashioned almanac, and was expected to give the up-to-date status of every banking institution within a given territory or locality. When a customer presented a paper bill with which the merchant was not familiar he referred to this. Sometimes the customer was told the bill was worthless. At other times he would be told that the bank issuing this had failed but was paying a certain amount on the dollar and the bill would be discounted accordingly."[7]

In 1865 Congress put a 10 percent tax on state-bank notes which forced most of the state banks into the national system.[8]

In these early days Saunders states that there was very little money in the country and no banks or trust companies to finance the drivers. He says:

> "In those early days cattle buyers usually met the sellers at some appointed place to close a deal for stock, and they would bring the purchase money in gold and silver in sacks on the backs of pack horses. When they reached the meeting places the sacks of money would be carelessly dumped on the ground where sometimes it would remain for two or three days without molestation; then when the settlement was made for cattle bought, the sacks were opened, the money dumped out on a blanket in camp and counted out to each man who had participated in the trades. I fear that kind of an arrangement would not work today, but in those days those rugged pioneers dealt strictly on the square."[9]

In another place he writes:

"In the early days an occasional buyer who resided in southwest Texas would purchase a herd of 8,000 to 10,000 steers on time. There was no payment made at the time of the purchase, for the reason that the buyer needed all the money at his disposal to defray the expense of the drive. The seller did not even take his note for the purchase price, because he knew he was dealing with an honest man. The only evidence of debt was the tally of the cattle, giving the numbers in each class, including the mark and brand they bore. The seller did not exact any promise from the purchaser to pay for the cattle at a certain time, for neither of them knew whether it would take one, two or three years for the buyer to dispose of his holdings, and get back to Texas again. There was always a satisfactory settlement, however, when he returned. If he had the money to pay for them it was all right, but if he had lost half of them in a blizzard, the seller did not take his note for the balance due and insist on its being secured by a mortgage. The slate was wiped clean and work began shipping up another herd on the same terms." [10]

Every ranch house was the depository of more or less money. The coin, if in considerable amount, was put in saddle bags, etc., and secreted in remote corners of the house or up under the roof or buried on or near the premises.

"When[11] the ranchmen bought stock of any kind they brought the money in gold and silver to where the animals were to be received and paid it out, dollar for dollar. They generally carried the money in leather belts buckled around their waists, but the silver, being more bulky, was placed in duckin' sacks and was loaded on a pack horse or mule. It was necessary in those days to know the weight as well as the value of money, and therefore it was a matter of current knowledge that one thousand dollars in silver weighed sixty-two and one-half pounds."

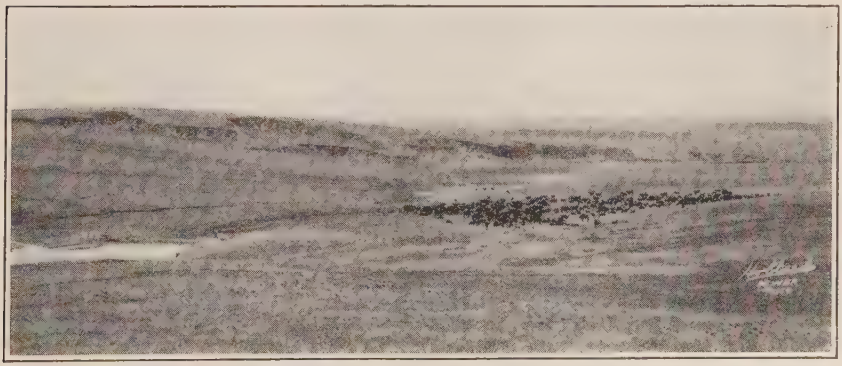

Fig. 3.—Where the buffalo once ranged. A modern beef herd at Battleground Springs near Sterling, Colorado.

The principal circulating medium in Colorado prior to banking days was gold dust, carried in small buckskin bags.[12] The smallest price of anything was 25 cents. National bank notes began to appear in 1863. Clark, Gruber and Company introduced coining machinery in 1860 and produced gold coin which contained 1 percent more gold than the government coins of the same denomination. These passed freely as money.

The First National Bank of Denver opened May 2, 1865, and the Colorado National Bank of Denver in August, 1866, by Kountze Brothers of Omaha. Luther Kountze had opened a branch of the Omaha bank in Denver in 1862. While at first Colorado banks were largely interested in mining, some banks evidently had a large share in the financing of the cattlemen. In 1872, 791 cars of cattle were shipped from Denver and other points on the Kansas Pacific and 31,250 head were delivered at North Platte on the Union Pacific. This movement was financed largely by Denver banks.[13]

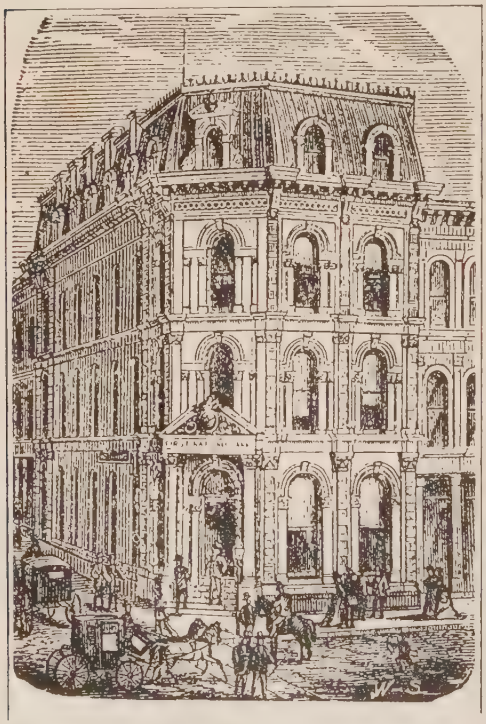

Fig. 4.—Old First National Bank in Kansas City. One of the first to specialize in loans on western cattle. From McCoy's Cattle Trade of the West.

McCoy writes that one of the first banks to specialize in cattle loans was the First National Bank of Kansas City. Drovers coming to Abilene were directed to this bank for financial assistance. Many would get New York exchange there to take back to Texas to avoid being robbed on the way home. McCoy reports that one cattleman unknown to the bankers and with no one to vouch for him, borrowed $10,000 on a plain note for 90 days at this bank, basing his request on the statement that he had 2,000 cattle at Abilene. The note was paid promptly at maturity. McCoy, commenting on the hazards of cattle loans at that time, says:

> "In a certain sense banking with cattlemen is extra hazardous from the fact that their herds are distant, often in different states and counties from the one in which the bank is located, and being a class of asset that has the power of self transportation, could be hurried off in a short time to regions in which force and the pistol is the only recognized law. This being the fact, the bank that affords them discount must do it as much upon the drover's honesty and honor as upon his financial responsibility. This requires the banker to be a keen, shrewd judge of human nature, who understands the financial necessities of livestock men and the nature of their business."

The latter statement is still true.

In the fall of 1871 more cattle were driven to Abilene than the market could absorb; the range was overgrazed and 250,000 cattle were estimated to have died on the Kansas plains during the severe winter which followed. The drive of 1872 was smaller, 300,000 head, but another large drive was made in 1873 and the market glutted again. McCoy reports that:

> "Such herds as failed to get into the Indian contracts were held upon the range and an attempt made to fatten them for the fall market. In order to do this, large sums of money had to be raised by such banks as were disposed to accommodate the cattle men. Many drovers were in debt in whole or in part for their herds, while others did not have means to pay off their surplus men. Instead of selling cattle at current prices, more money was borrowed and by September 1, the Texas drovers were in debt fully $1,500,000, payable in October." [15]

The panic of '73 came in September. The corn crop was short, banks failed to renew the notes of the cattlemen and cattle were sacrificed at heavy loss when in no condition to sell. Thousands were killed for their hides and "tanked," while thousands more were scattered thruout the West wherever they could be fed. It was a hard blow to the stockmen, but from that time on more provison was made for winter feeding.

A Beef Bonanza

An unprecedented expansion of the western cattle business followed the depression of 1873. There were uncounted miles of range, untouched by the buffalo, now practically exterminated, with cheap cattle to stock them, a good market for beef, railroads to carry the stock to market and well-equipped packing facilities to put the product in shape for the ultimate consumer. Cattle weighing 800 to 1,000 pounds in Texas would put on 300 to 400 pounds more on the plains of Colorado, Wyoming or Montana. Steers worth $7.00 to $12.00 a head in Texas could in the late 70's be driven north at a cost of $2.00 or less a head, wintered for $2.00 a year more and would then sell for $30 a head at the river markets when finished.

Such chances for profit attracted not only experienced cattle men but many who were not experienced. J. M. Carey (later governor) drove the first herd into Wyoming in 1871. In 1880 it was estimated by close count that 164 herds aggregating 384,147 cattle crossed Kansas for northern territory.[16] It is variously estimated that in 20 years (1870-1890) from 8,000,000 to 10,000,000 cattle were driven from Texas to the north, some coming from as far south as Brownsville and going as far north as the Blackfoot reservation in Montana. Many cattle were brought west from Iowa and Illinois.

In 1883, General Brisbin, an army officer who had spent 12 years in the West on active duty, wrote a book, The Beef Bonanza, to encourage young men to come west and produce beef. This western country, he said, would produce all the beef for the nation, if not for the world and the industry would move entirely away from the cornbelt. He believed that the profits on $25,000 invested in cattle would in 5 years be $35,000 after paying 10 percent interest on the capital, and that a stock company putting $250,000 into the business could make 25 percent on its money annually.[17]

J. W. Iliff, the Colorado cattle king, was quoted as saying:

> "This (the cattle business) is the grandest opportunity for investment ever offered; there are no uncertain risks attached to the business; the losses are almost nothing, and the profits many times those afforded by other investments."

J. L. Brush of Weld County said:

> The average profit on capital invested in cattle will not fall short of 40 percent per annum over all expenses."

These estimates were based not on theory but on what cattlemen had actually made. One man had invested $55,000 in a ranch and cattle in 1867 and by 1875 had $100,000 worth of cattle after selling $63,000 worth. A cattle drover in 1872 had $50,517, mostly borrowed, invested in a ranch and 4,000 cattle. By 1875 he was only $2,018 in debt, and had stock on hand valued at $68,350 after charging 10 percent on his money invested.[18]

General Brisbin comments that to succeed like this one must have

> "patience, shrewdness, and self-reliance, with any amount of energy and capacity, and above all, good luck. An Indian raid, a storm, sickness, cattle disease, or a dozen unforeseen accidents may arise whereby all the profits may be cut off and capital destroyed."[19]

What Brisbin and others did not realize was that these profits in the late 70's could not continue indefinitely and that over-grazing and over-production were already foreshadowing disaster.

Interest Rates and Cattle Financing, 1867-1884

Interest rates seem to have varied greatly during this period, depending upon financial conditions, upon the character and ability of borrowers and on the condition of the cattle business. M. C. McClure, a cattleman in those days, now with the Federal Reserve Bank, Kansas City, states that in the 80's the rate of interest was usually 1 percent a month to which was often added commissions sufficient to bring the interest to 15 percent per year.[20] Some of the older Colorado stockmen report that 8 percent and 10 percent were the prevailing bank rates in Colorado. General Brisbin speaks of 10 percent interest as if it were the usual rate, tho he says that some men made a successful start on money for which they had paid 25 percent.[21]

Bancroft in his historical writings indicates that high rates of interest were sometimes paid. In regard to early interest rates in Colorado he says:[22]

> "Banking has always been a profitable business in Denver. Twelve percent per annum was the usual bank rate (1886), but real estate loans could be had at 8 percent or 10 percent. There is no usury law, borrower and lender fixing such rates of interest as they agree on. **In times of excitement 3 percent a month might be asked and given.**"

Bancroft also quotes a French traveler, G. Weis, who wrote in 1884 of a cattle firm in Montana that borrowed $13,500 at 2 percent a month for 6 years, and showed a profit of $50,073 over the total investment and expenses at the end of that time. Weis wrote that[23]

> "banks loaned money to be invested in stock and there was no more sure investment in Montana."

Baron Richthofen wrote that a cattleman could get credit more readily than a merchant in those days.[24] Peter G. Scott, veteran banker of the Bent County Bank of Las Animas, Colorado, established in 1875, says:

> "In the early days of this bank cattlemen proved to be satisfactory customers for altho they borrowed heavily at times, they had the property to sell so that payments were made and loans cleaned up at least once a year. Then these men would sign with each other so that taking a chattel mortgage was a rather rare thing to do. Money made money in those days so that these men could pay a high rate of interest and still make money. Interest charges did not go down at once. The strongest men would get loans a little cheaper than the average, then that circle would keep enlarging till more would get money at the lower rate. In the earlier days well-known cattlemen could get money at 1 percent a month, while poorer risks might pay 15 percent or more.'[25]

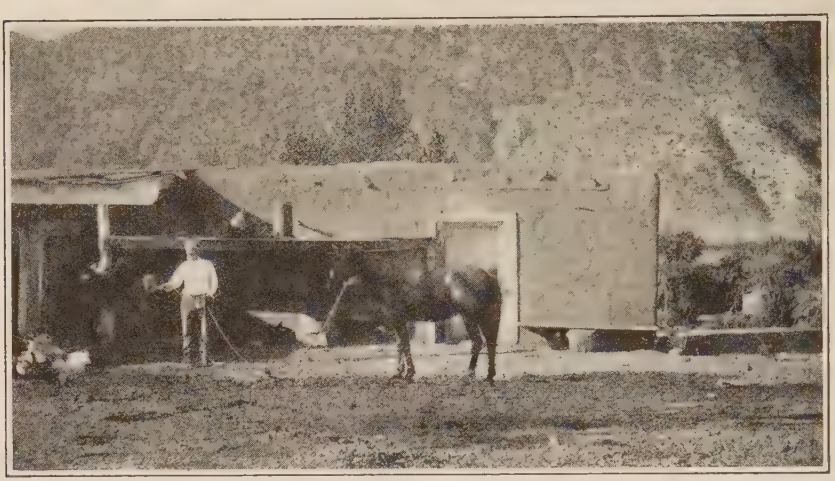

Fig. 5.—Ranch house in 1885. Little capital was needed in those days. Courtesy of Frank Bloom, Trinidad, Colorado.

Colonel Ike T. Pryor, a leading trail driver in early days, and a former president of the American National Live Stock Association, writes of his experiences in financing cattle drivers:

> "I borrowed money from Austin and San Antonio banks to make my drives. I would borrow as much as $200,000 on my plain note. I could not give a mortgage on moving herds of cattle. This money would put many herds on the trail and when I would get to Colorado, Nebraska or Wyoming, the stockmen I would sell to would borrow from one of the nearby banks to pay for the cattle they had bought from me. In those days the Pueblo, Cheyenne, Denver and Kansas City banks took a large amount of cattle paper. The rate of interest was never less than 10 percent—usually 12 percent—and sometimes as high as 18 percent. I have often borrowed heavily from an Austin bank, gone 100 or 200 miles west of Austin and bought several herds to put on the trail, giving my draft on the Austin bank in payment. The ranchmen would want the payment made with $100 drafts. I remember giving one ranchman $5,000 in $100 drafts. I asked him why he wanted it in this way and he replied that when he needed $100 he could use one of the drafts. I would drive the cattle I had bought, to the northwest, sell them, convert my drafts into Kansas City exchange, return to Austin and pay my note, and sometimes I would have nearly all the money I had deposited still in the bank, as the cattlemen were slow in sending their drafts in. There was such a degree of confidence in those days that they looked upon a draft as cash." [26]

Cattlemen were not the only ones to pay high rates of interest. The Union Pacific paid as high as 18 percent and 19 percent for some of the capital needed to finish the road in 1869.[27] In 1886 during the boom in western mortgage loans[28] the interest rate in western Kansas went as high as 2 percent a month.

Financing Thru Stock Companies, 1880-1885

These reports of enormous profits in the cattle business attracted a great deal of capital from the East and from Europe. Large stock companies were formed and financed by the sale of shares, many of the larger ones being backed by foreign capital. Since theoretically, the large outfits could operate more economically than small ranches, it was believed that the larger the company the greater the profits that would be made.

The Prairie Cattle Company, organized in 1880, was backed by Scotch capital thru the Scottish American Mortgage Company of Edinboro. The total capitalization was approximately $2,500,000, but its holdings were considered worth $4,400,000 in 1885. This company bought the Jones Brothers, or J. J. Ranch in southern Colorado in 1881, later the Crosselle (+L) ranch in northern New Mexico, and the L. I. T. ranch in Texas. The following is a list of other large companies as compiled by John Clay:[29] The Swan Land and Cattle Company ($3,000,000); The Texas Land and Cattle Company; The Matador Land and Cattle Company ($2,500,000); The Hansford Land and Cattle Company; The American Pastoral; The Powder River Cattle Company; The Western Land and Cattle Company; The Cattle Ranch and Land Company ($1,000,000); and the Western Ranches. The X. I. T. ranch had an investment of approximately $4,000,000 at this time.

The dividends paid by some of these companies in 1883 were as follows: Prairie Cattle Company, 20½ percent; Texas Land and Cattle Company, 12½ percent; Matador Cattle Company, 8 percent; and the Arkansas Valley Cattle Company, 10 percent.[30]

The announcement of such high dividends caused a rapid increase in the number of cattle companies. Ranchmen who had made good money and were able to see the coming crisis, sold their land and cattle at high prices. The average mortality of range cattle was represented as 1 percent per year with not over 7 percent loss in the worst winters. Herds were to double in numbers every 4 years. No doubt was expressed as to the continuance of high prices for cattle or of the abundant unfailing growth of grass on the range.

The bonanza period came to an end after 1884. The years 1882-1883 had been profitable ones following the drought of 1880 and cattle values were high in comparison to other commodities. The range soon became over-crowded and in 1885 cattle prices began to fall. The Prairie Cattle Company sold steers at $35.00 a head in 1882, and at $17.90 in 1886. Investors who would have liked to get their money back saw little hope of getting it.

A number of errors were responsible for the serious condition of the cattle business at this time. The first was in expecting the financial successes of the 70's to continue indefinitely. Any business that pays 25 to 50 percent a year will soon be overcrowded unless it has a virtual monopoly of that business. High profits lead to increased production and inevitably to the production of a surplus. This surplus must sell at a low price and sets the price for all the product. Another error was in supposing that anyone could make good money in cattle ranching regardless of experience, business judgment, or suitable range. Cattle were generally bought on "book account" which was almost certain to be in favor of the seller. On one ranch which was estimated to have 40,000 head of cattle, only half of these were ever found. In another case a calf crop of 4,000 head was guaranteed, where the actual number was about 2,500. Over-confidence in the profits that were to be made encouraged lax management.

Hard winters in 1885-1886 and 1886-1887 caught the unprotected herds and wiped out many, while losses of 50 percent were common. Thin cattle were driven onto an overstocked range in late fall to await the winter storms, which fatter cattle might have weathered but which they could not. Hagedorn gives the following account of the severe winter of 1886-1887 in the Dakotas:[31]

> "Conditions thru the summer of 1886 had been menacingly unfavorable. The drought had been intense. A plague of grasshoppers had swept over the hills. Ranchmen accustomed to store large quantities of hay stored little or none, and were forced to turn

Fig. 6.—An old-time chuck-wagon on the Circle-Diamond ranch in 1885. Courtesy of Frank Bloom, Trinidad.

all their cattle out on the range to shift for themselves. The stem-cured grass, which generally furnished adequate nutriment, had been largely consumed by grasshoppers. What there was of it was buried deep under snow.

"The first blizzard came early in November and was the worst within the memory of the settlers. One blizzard followed another for three months and the plains were drifted deep with snow. The cattle recently brought in, largely yearlings, succumbed first. The older stock kept going a while on sagebrush and the branches of young cottonwood trees. They wandered into the towns eating the tar paper off the shacks. There was no fodder or any chance of help, nothing to do but watch them die. They died by the tens of thousands. Sage chickens and rabbits were smothered under the snow, men rode out into the storms and never returned, children were lost between the ranch house and stable. When the snow went in March the country was desolated."

Some who had gone into the winter with 3,000 head had less than 400 left. The Hash Knife outfit, which had owned 100,000 head, lost 75,000.

One result of the disaster was to curtail credit. As in 1918-1922, the safe operator who held on to what he had made in the 70's, who had not gone in debt, and who held a reasonably tight line on expenses was usually able to pull thru. Those operating heavily on borrowed money were more frequently wiped out. Cattle went down in value for 9 to 10 years according to Pryor,[32] the decline in price being about 7 percent per year. He writes:

"In 1884, I remember buying some two-year-old steers for $12.00 and $16.00 out of the Searight and Carrothers herd in Zavala County, Texas, and offered to take the entire herd of 10,000 to 12,000 head at $25.00 per head. They refused this offer. Nine years later, in 1893, I purchased this same herd for $6.00 per head, driven thirty miles and loaded on the cars at Uvalde by the owners—no calves counted and with a guarantee of 2,500 three and four-year-old steers in the purchase. This was a fine herd of high-bred Shorthorn-Herefords."

Andy Adams, an early-day cattleman and author of several books on the early range days, says that:

"The year 1884 marked the end of the cattle boom in Texas, and the banks suffered severely. Loan companies and trust companies, including banks, lost their heads in loaning millions on the crest of the boom, and when the crash came, it bankrupted both borrower and lender. My best recollection is that money loaned on Texas ranches and cattle commanded 7 percent to 8 percent. The money was invested in grazing land, fencing and cattle at boom prices. Yearling steers that sold in the spring of '84 at $13.50 per head, were

slow sale in '85 at $6.00, and barely quoted in '86 at $3.00 per head." [33]

Note. Prices for native beef steers in Chicago reached their highest yearly average per cwt. in 1882 ($6.25) and were lowest in 1889 ($3.90).—Daily Drovers Journal Yearbook, Chicago.

John Clay states that following the reverses of 1886, money to lend on cattle was exceedingly scarce.[34]

"There were no cattle loan companies in these days, the banks were small and poorly equipped, not in the ability of their officers, but in deposits and outside resources. A great deal of capital had been placed in companies from the east and abroad, but the loaning of money as a separate business was little known. One percent a month was the regular rate. My actual experience in this line began in 1883, and the established rate in those days was 10 percent compounded every three or six months. As time told its tale the rate was not adequate to the risks taken."

A New Cattle Boom and New Financing Agencies

After 1893 the beef business improved to some extent. It had been demonstrated in 1885-1887 that the range cattleman could not take over the work of the cornbelt feeder and as time went on more cattle were fattened on farms on hay and corn. As conditions improved, the commission men discovered that money loaned on cattle was well secured and that this security increased in value as the cattle gained in weight. The farmer who had corn to feed did not always have the money to buy steers. This money could be obtained in the East at 4 and 5 percent and loaned at 8 and 10 percent making a good profit for the commission man.

An article in the Kansas City Daily Drovers' Telegram describes the growth of the cattle loan business from 1892 to 1898:

"In 1893 a marked stringency in the financial situation developed and the disastrous panic of that year is well remembered. It was then that the true value of 'cattle paper' became known and appreciated. While banks all over the United States were toppling, those located at the large livestock centers stood the storm. During the time real estate was unsalable, stocks of merchandise could not be realized on, bonds, stocks and securities were so much useless paper, but cattle were cash. People had to eat. While the holders of other classes of securities were unable to make collections, the fortunate holder of cattle paper notified the farmer to ship his cattle to market. **(The writer does not say how the man with the cattle liked it.)** Hundreds of thousands of dollars of maturing paper was thus met. Since then it has become justly popular. It is eagerly sought both at home and abroad and is rated in financial circles among the desirable classes of commercial securities. The rate of interest it pays, its security and promptness in payment has made it

so. In 1896, it was found that approximately $15,000,000 had thus been loaned on cattle paper by the commission firms at the Kansas City stockyards. During the year just closing (1897) with an increase of over 100,000 cattle, an increase in values and an enlarged movement of cattle direct to feed lots from Western ranges, $20,000,000 has just been loaned. Many farmers have gotten funds from home banks, estimated by the bank commission of the state to be $10,000,000."

Cattle financing has its cycles of expansion and depression similar to and running parallel to those of the cattle business. Prosperity on the range means prosperous times for the handlers of cattle paper, but as prosperity bred lax methods and lack of foresight on the plains in 1883, so "easy" money in cattle loans led to carelessness in making loans and checking securities. This was true in 1898 as in 1885 and 1918.

Bently states that

"in 1883 a certain cowman was reputed to be a millionaire. In 1885 he was rated at not above $50,000. Later he became to be recognized as practically insolvent. He has been hard pressed until recently (1889). Since January 1, 1897, he has been in the market again buying everything in sight and agreeing to pay top prices for everything." [54]

Another drop in cattle values was to come. The prosperous times of 1895-98 had brought inflated values the same as in 1873 and 1884. The cattle situation in Oklahoma preceding and following the collapse of the boom is described by Dale[36] as follows:

"The commission men, tempted by large profits, were eager to make loans to any man who had a fair location, reasonable ability as a cowman and a very little collateral, provided his reputation for honesty was fairly well established. They were all the more eager since they were, in nearly all cases, lending other people's money. Had the conservative Eastern and Northern bankers realized the risks that were being taken with their precious dollars, they would have doubtless passed some sleepless nights.

"The ease with which money could be obtained tempted many a cowman to enlarge his business at the very time when the conditions of the cattle country demanded retrenchment. Often a man with a good range and ten or fifteen thousand dollars worth of cattle would decide that it was a great pity not to have sufficient cattle to stock that range and would hasten to Kansas City or Chicago and borrow money. If his reputation were good and he had fifteen thousand dollars worth of cattle, he could probably borrow twelve thousand dollars on them. With this twelve thousand he would buy more cattle and immediately proceed to put them up as a collateral for a loan of ten thousand; the cattle bought with this furnished collateral for a loan of eight thousand, etc.

"By 1898 nearly every ranchman in this region was running his business on just this kind of system. Men with three or four thousand dollars original capital had fifteen or twenty thousand dollars worth of cattle; those with ten to twenty thousand dollars had in many cases from a hundred thousand to two hundred thousand dollars worth. The money was usually loaned from six to twelve months time, eight months being the ordinary period. The interest was from 8 to 10 percent, with sometimes an additional 3 or 4 percent paid separately and called a 'commission.'

"The commission firm's method of doing business was very similar to that of the ranchman. It would lend him money, taking his note and mortgage on his cattle. This note and mortgage, after being endorsed by the commission firm, would be sold to an Eastern banker at about its face value, or it would be given as collateral for a loan of almost its face value. The money obtained by this sale or loan would be lent to another cowman and the process repeated as

As in 1886, severe winters proved the undoing of both the cattlemen and the commission men. Losses in the winter of 1898-99 ran from 25 to 50 percent or more and the following winter the loss was almost as heavy. Loans could not be paid and were renewed on inadequate or non-existent security. The land on which the range man depended was being rapidly homesteaded and could no longer be replaced. When the end came and the loans were called in, the price of cattle dropped so rapidly that cattlemen had to sacrifice their entire holdings to even partially satisfy the holders of their notes.

One incident of this strenuous period was the failure of a prominent cattle speculator in Kansas in 1898.[37]

"This cattleman started in 1894 without a dollar and had made half a million by 1898 in cattle feeding and speculating in cattle feeding and cattle loans. He shipped 50,000 head of cattle in 1896. These were the years of expansion following the depression of 1893.

"He would buy as many as 50,000 cattle at one time with borrowed money, secured by a mortgage on the cattle, and would sell them in small lots to feeders, taking their notes. When these were paid he would settle with the commission men. The commission men got 9 and 10 percent for their loans and he would sell the paper in the East at 5 and 6 percent.

"The day following Thanksgiving, 1898, this man failed for $1,500,000. He had obtained loans on the full value of his cattle as well as on the feed and had cattle on feed from Texas to Oregon. The total cattle paper involved was over $2,000,000, with assets of possibly $500,000."

The effect of this failure was to render cattle paper temporarily hard to sell and commission firms were less anxious to handle it. It was following this that the packers began to develop the cattle loan companies.

Later Cattle History, 1900-1925

The principal changes from 1900 to 1914 were the settlement of most of the open range suitable for farming, a consequent increase in land prices, a gradual increase in numbers of beef cattle up to 1907, a subsequent decline in number and a decline in consumption of beef per capita. Coincident with this was a decline in export beef trade until 1914, when our imports of beef were more than our exports.

Settlement of the Range.—In 1860, a little less than 2,000,000 bushels of wheat were produced in the territories and in Kansas. This included all the trans-Missouri section but California, Oregon and Texas. In 1920 this same territory produced over 44,609,000 bushels out of the 73,099,000 bushels produced in the United States. This one item alone indicates how the western range had been taken up.

The increase in number of farms and in total area farmed in eight mountain states is shown in the following table, together with the corresponding increase in population.

Table 1.—Number of Farms, Land in Farms and Population in Eight Mountain States, 1880-1920.[38-39]

Census	Number of Farms	Acres in Farms	Population
1880	25,043	3,976,377	653,119
1890	49,398	14,765,862	1,213,935
1900	101,327	46,396,284	1,674,657
1910	183,446	59,533,420	2,633,517
1920	244,109	117,337,226	3,366,101

The effect of this increase in farming land was not alone the loss of so much grazing land but the absorption of much of the best land, the fencing in of the water and a great increase in the price of hay land. Only about 10 percent of the land in the mountain states is in farms but it is this land which the beef man must have as a center of his operations.

Decrease in Beef Cattle Since 1907.—The number of beef cattle in the United States increased until 1907 when there were estimated to be 51,566,000 head other than dairy cows. The number then declined to 35,855,000 in 1914, increased to 45,085,000 in 1919 and was reported to be 39,609,000 on January 1, 1925.

Figure 7, charted from statistics gathered by Armour's Livestock Bureau shows the rise and fall in net beef exports from 1907 to 1923. It is interesting to compare this with Figure 8. The period when we were importing more beef than we were exporting (1914) was the period when the purchasing power of beef cattle was the highest and also when the average consumption of beef per person in America was about to reach its lowest level.

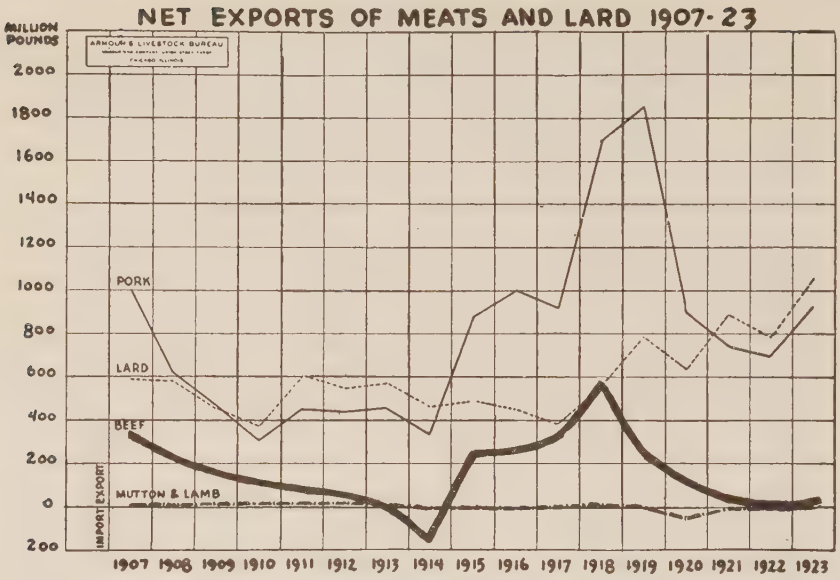

Fig. 7.—Net exports of meats and lard 1907-1923, Armour's Livestock Bureau. Note the excess of imports over exports in 1914. Also the sharp decline in exports after 1918.

Table 2.—Numbers of Cattle other than Dairy Cows in the United States, 1870-1924.[40]

Year	Number	Year	Number
*1870	14,885,000	1917	41,689,000
*1880	23,842,000	1918	44,112,000
*1890	34,852,000	1919	45,085,000
*1900	50,584,000	1920	43,398,000
1907	51,566,000	1921	41,993,000
*1910	41,178,000	1922	41,977,000
1914	35,855,000	1923	42,803,000
1915	37,067,000	†1924	41,720,000
1916	39,812,000	†1925	39,609,000

*U. S. Census Reports.
†Yearbook 1924.

The above statistics are the estimates made annually by the U. S. Department of Agriculture and checked every 10 years by the census reports. These estimates and census figures are for all cattle except dairy cows and include dairy calves and young stock.

Since 1925 the Department of Agriculture has made its estimates on a new basis. Taking their estimates for total cattle and subtracting all dairy cows and all dairy heifers over 1 year old, there remained in 1926, 33,091,000 other cattle and in 1927, only 31,617,000 head.

Decrease in Consumption of Beef per Capita.—One reason frequently given to explain the troubles of the cattlemen is that the 'meatless'' days in force during war times developed in the consuming public a habit of eating less beef. Statistics compiled by Armour and Company, show that we have been gradually eating less beef per capita since about 1890-99 (Figure 8). These figures show that in 1915 we were eating one-third less beef than before 1900 and less than we did during 1919-1920 following the ''meatless'' days. The lessened consumption in 1921 may be explained by the greater number of people then out of employment owing to the depression.

The figures for the years previous to 1907 given in Table 3 are estimates only.

Table 3.—Consumption of Beef per Capita, 1830-1922.[41]

1830-39	75.7 pounds	1912	61.7 pounds
1840-49	79.7 pounds	1914	59.3 pounds
1850-59	85.6 pounds	1915	56.0 pounds
1860-69	73.7 pounds	1916	57.3 pounds
1870-79	77.8 pounds	1918	65.2 pounds
1880-89	87.2 pounds	1919	58.0 pounds
1890-99	88.3 pounds	1920	61.2 pounds
1900-09	76.1 pounds	1921	57.8 pounds
1910	71.8 pounds	1922	61.4 pounds

It is evident that the decline in consumption of beef is not a matter of recent date. The low point in 1914-15 corresponds to the period when we were importing beef to supply home demand.

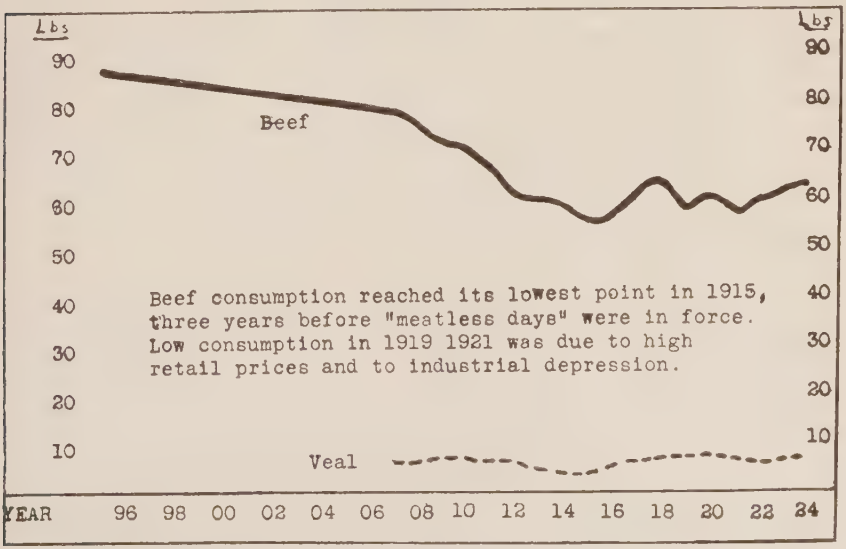

Fig. 8.—Beef consumption per capita in the United States 1895 to 1924. Adapted from Progressive Beef Cattle Raising; Armour's Livestock Bureau, Chicago.

Effect of the World War.—Prices for beef and for beef cattle were relatively high in 1914. With the outbreak of the war in Europe, prices of all classes of goods rose rapidly, but rose relatively faster in non-agricultural lines, especially after 1917. There was great demand for foodstuffs in 1917, to feed the allied armies as well as the civilian populations. The production of beef rose to meet the demand, bringing about increased values for breeding cattle, both purebreds and grades. One factor which raised beef prices in the United States was the inability of European nations to get meat from Argentina due to lack of shipping facilities.

The end of the war in 1918 caused a temporary drop in business activities, but this was followed by a period of great expansion and speculation. Liberty bonds were cashed below par, credits were over-extended and an unprecedented demand for goods caused prices to rise still higher. Capital was greatly in demand to invest in land, cattle, buildings and other farm improvements. It was believed that land values would continue to rise to higher levels. Farms changed hands frequently, often at phenomenal prices.

Peak Prices.—The high point in exports of beef and beef products had been reached in June, 1919, except for some heavy shipments in October. Symptoms of a decline were evident, however, as early as February. Native beef cattle reached their top price, $21.50, at Chicago, in December, 1919, due to the International sales, but the highest monthly average, $16.45, had been reached in August. Heavy steers weighing 1200-1500 pounds had reached their highest monthly average of $17.65, in September, 1918, nearly a year earlier. Western range steers, grass fed, reached the top at Chicago in August, 1918, at $14.90. The hide market was at its peak August 1, 1919, when heavy native-steer hides reached forty cents a pound. Forty cents a pound means $32.00 on an 80-pound hide or $24.00 on the average 60-pound hide. Within 2 years this price was to drop nearly 75 percent.

The Drop in Prices.—Probably the best measure of declining prices at Chicago is the monthly general average of native beef steers, all weights. The peak price was $16.45 for August, 1919, Figure 9.[42] Prices began to go down rapidly after November, reaching $14.35 in December and $12.30 the following April. There was a slight rise during the summer of 1920, $15.00 being the average in July. Then prices dropped to $12.00 in November and to $10.10 in December. In February, 1921, the price was $8.20, or less than half what it was 18 months before. The low point was reached in December, 1921, at $7.00.

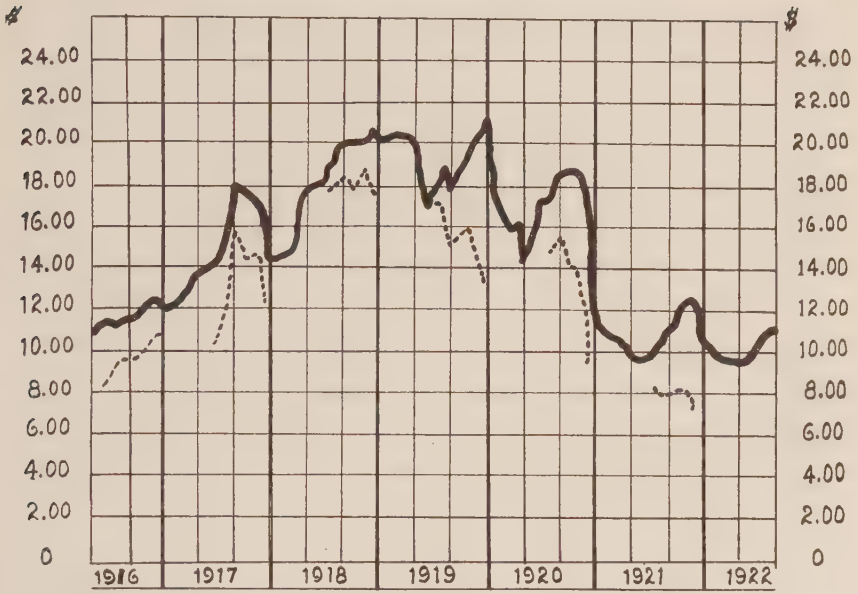

Fig. 9.—Top prices of native beef steers and western range cattle at Chicago, 1916-1922. Falling off in export trade due to lack of buying power in European countries, competition with Argentine meats on the European market and deflation were the chief causes of falling prices, combined with market and deflation were the chief causes of falling prices, combined with heavy shipments of cattle on the home market. Courtesy of Swift & Company, Chicago.

Stocker and feeder prices dropped in about the same degree. The high monthly average was $12.65 in April, 1919. The decline was gradual from this point on. In May, 1920, the price was $10.00 but by December it was $7.10. The low point of $5.45 came in November, 1921. These low prices for stock cattle in 1921 literally knocked the bottom out of cattle values back on the ranges.

The year 1921 will not be readily forgotten by range cattlemen. Cattle feeders had lost heavily in the spring of 1920 and prices for feeder steers were much lower that fall. Then the general deflation in December, 1920, drove the market to unexpectedly low levels in the spring of 1921, causing heavier losses to the feeders. By the fall of 1921, cattle feeders were afraid to buy at any price and the range men found themselves with increased herds, falling prices and no demand for cattle. Those who were in debt, as most were, could not liquidate their notes.

John Imboden,[43] writing in the Breeders' Gazette, October 13, 1921, tells of a ranchman from San Antonio, Texas, who sent to Fort Worth some 300 cull cows. His net returns were $57.00 on the lot, or less than twenty cents a head. Freight, yardage and feed absorbed the value of the entire shipment.

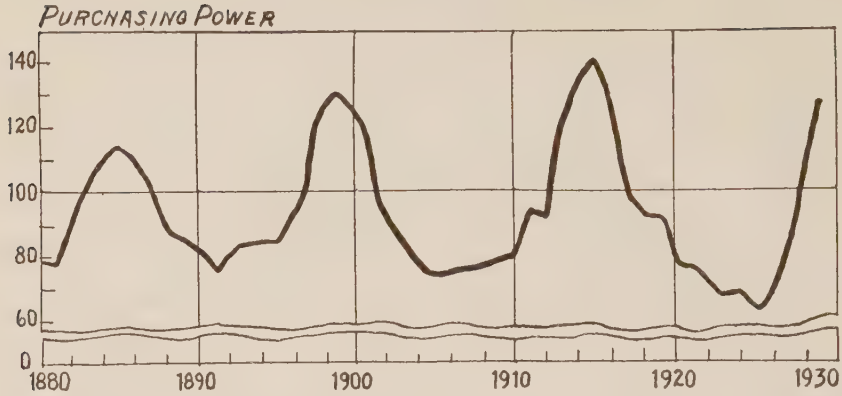

Figure 10.—Purchasing power of the prices of beef cattle in the United States, 1880-1929. 100 represents average buying power in comparison with other goods. The striking feature of these curves is their regularity. The rise since 1925 is of especial interest. Courtesy of G. F. Warren, Cornell University.

Cattlemen who held onto their cows, believing that the market must soon revive, found that the rise did not come. The market price for cows, which was at its lowest in December, 1921, rose somewhat in 1922 and 1923, yet the average price for cows in 1924 on the Chicago market was only 10 cents above the 1921 price.

The foregoing is only a brief review of the depression and of the events leading up to it. Enough has been said to give the necessary background to future discussions on the financing of the cattlemen during this period. No attempt can be made here to discuss the effect of increased taxes, increased freight rates and high wages, all of which added tremendously to the farmers' burdens. While all of these tend to become equalized in time they do not go down as rapidly as do prices of raw materials.

Business Cycles

Much has been written since 1920 about business cycles; these regular fluctuations in business conditions from prosperity to inflation, then to depression and hard times, and back to good business again. When inflated prices drop suddenly following a "boom," business becomes temporarily disorganized and a "crisis" results. Such crises occurred in 1837, 1847, 1857, 1873, 1884, 1893, 1907 and 1920 as well as in earlier periods.

Each industry may have its own cycles or periods of ups and downs, more or less independent of national or world cycles. Real prosperity in any business depends not on high prices but on whether returns in that business are high compared with those in other industries. Cattle prices reached their peak in 1918 during the last

cycle, but the buying power of cattle was at its highest in 1914, when other things were relatively cheap.

Figures 10 and 10a, based on the data of Warren and Pearson of Cornell University, show three periods of high relative values or high profits in beef-cattle production since 1880 with intervening periods of low relative values and low profits. The peak points were reached in 1885, 1899 and 1914 with periods of low value in 1880, 1891, 1905 and 1921-23. Figure 10a, modified by Armour & Company of Chicago, shows in addition the numbers of cattle coming on the Chicago market during this time.

Periods of scarcity correspond closely with periods of high profits, and periods of over-supply correspond with periods of low profits.

The big crises in cattle financing such as the failure of the cattle companies in 1885-86, the losses of the Kansas City commission men in 1899 and the serious financial losses sustained by the banks and cattle loan companies in 1921-24 correspond closely in point of time to the decline in beef cattle values at these periods.

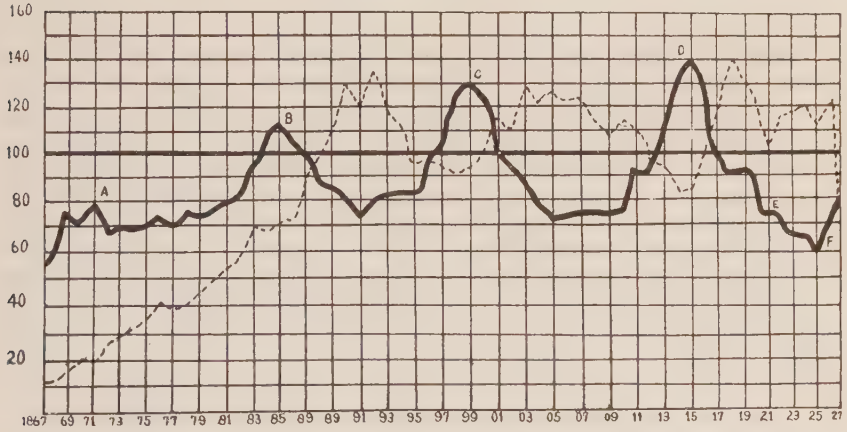

Fig. 10A.—Cycles in the buying power of beef cattle 1867-1927. (Heavy line—buying power of cattle; dotted line—cattle receipts at Chicago.) Note the relationship between market receipts and buying power. As markets become overstocked, buying power decreases. A shortage in beef cattle results in greater profits to the cattlemen but brings about another oversupply. Courtesy of Armour's Livestock Bureau, adapted from monthly letter to Animal Husbandmen, Oct., 1927.

A. Panic of '73.

B. Failure of large cattle companies.

C. Commission men lose heavily at Kansas City.

D-E. Heavy accumulation of cattle paper by banks and loan companies.

E-F. Heavy losses by banks and loan companies.

W. C. Mitchell,[44] an authority on business fluctuations says:

> "Crises are but one feature of recurrent business cycles. A crisis is expected to be followed by a depression, the depression by a revival, the revival by prosperity and prosperity by a new crisis."

Each phase of the circle breeds the phase which is to follow. A crisis is caused either by over-expansion or because demand falls off. This crisis brings a time of depression when goods sell slowly and at low prices because there are more sellers than buyers. Then after some of the extra producers drop out of business, the demand catches up with supply, business begins to pick up, prices rise, new people come into the business, new factories are built, and wages go up, making more buyers for goods. Prices rise higher and prosperity is again the rule.

When prosperity comes in the cattle business, people are inclined to think that it will continue indefinitely, loans are made to expand still farther and the whole business becomes top-heavy. Every new herd of cattle established or increased during boom times, helps to overload the market. When this occurs, prices fall rapidly, and those who have built largely on borrowed funds find themselves faced with disaster.

The depression of 1920-21 was not the first of its kind. The following, written in 1824 by an Irish priest, shows conditions existing in Ireland a century ago, somewhat similar to those of 1921.[45]

> "Bankers supplied the government with abundance of loans for carrying on the war with Napoleon so that the Irish beef and pork brought an enormous price. Feeding became the most lucrative of all traffics in this country (Ireland). They bought the ox in the spring for 10 pounds ($50) and each sheep for 1.10 pounds ($7.50) and sold them in the fall for 20 pounds ($100) and three pounds (15) so they gained with little or no trouble ($75) an acre. * * * The facility of obtaining loans flattered their (the land owner's) pride and engendered prodigality, servants, horses, hounds, dinners and dresses, and it should not be forgotten, interest, which rapidly swelled on the one hand, while the unsuspected return of peace in 1815 annihilated the rent roll.
>
> "Had they the presence of mind to pull in their horns at once—to make every possible entrenchment, they would have served their own cause much and that of their creditors; no, they went on still borrowing, in hopes that ambition or discord or some other evil passion would again light up the flame of war in Europe, that would revive the fallen prices. Whilst they were thus in suspense between hope and fear; not knowing what to do, the failure of Roche's and Leslie's banks in Cork, in the year 1820, involved the fall of all the banks of the province, and threw everything into confusion; neither trade nor agriculture could any longer be carried on for want of cir-

Fig. 11.—The $35,000 Shorthorn cow, 10th Duchess of Geneva, and her heifer calf. This price, the highest ever paid for a beef cow, was bid at the New York Mills sale in 1873, just before the panic of that year. From Sander's History of Shorthorn cattle.

culating medium. The social machine stood still; nothing was bought or sold; all the laboring classes were disemployed, without a penny in their pocket to buy the necessaries of life; now running in mass to the mayor's, craving, but in vain, for employment; then flying in fury to tear the closed banks from the very foundations. During that anarchy, the few wealthy merchants of the city, represented to the government the precarious state of the community, and took a loan of 7,500 pounds at interest, in order to set the commercial machinery in motion again. The merchants, according to the measure of security which they could give, divided this loan amongst themselves."

Cycles in Purebred Beef Cattle Sales.—Prices for purebred beef cattle have gone thru the same fluctuations as those for market stock. The greatest Shorthorn sale in history, the New York Mills sale of Duchess cattle, took place September 10, 1873, just a few weeks before the panic of that year. Ninety-two females sold for an average price of $3,813, 11 Duchesses averaging $21,709 each. High prices for breeding cattle continued in some degree until 1876.

Sanders says:

"As is usual in the case of all such extensive speculations, there had been a great expansion of credit. Notes given for cattle at high prices were beginning to mature. Such paper now became the subject of close scrutiny at the hands of prudent bankers. This marked the beginning of the end of the most astounding trade in pedigreed cattle to be found in agricultural history." [46]

Hereford history furnishes additional evidence of changing fortunes. Some of the best foundation stock ever imported, Anxiety,

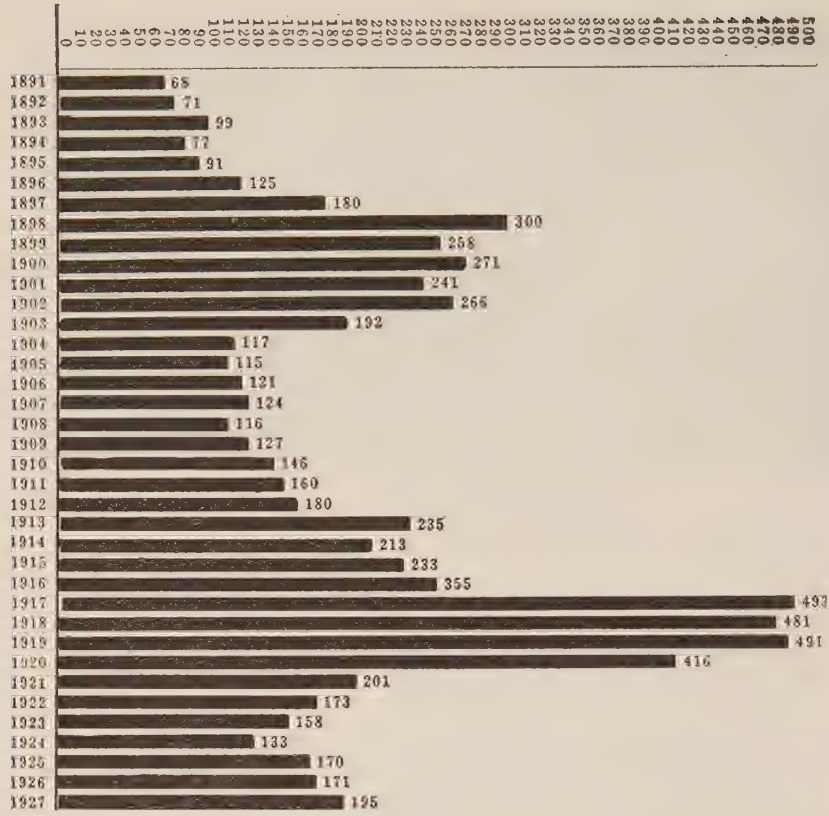

Fig. 12.—Fluctuation of prices of purebred Hereford cattle 1891-1927. Note how closely these curves correcpond to the curves of buying power of market stock in Fig. 10. Purebred prices tend to stay slightly up longer than do market prices. Prices are now on the up-grade. Courtesy of John M. Hazelton, American Hereford Journal, Oct. 1, 1927. (Average for 1928 was $210.)

Anxiety 4th, The Grove 3rd, Sir Bartle Frere and Garfield were brought over during the period of greatest expansion on the range, 1879-1883. The Wyoming Hereford Corporation was organized in 1883 and imported over 400 Herefords. From 3,500 to 4,000 Herefords were imported in the years immediately following 1880.[47] Some of the best Hereford sales of this period were made in 1882 and 1883. The Hereford sale at the Kansas City Fat Stock Show in 1883 made an average of $574.20, which stood as a high record for many years.

With the fall in range-cattle prices in 1885-86, the market for registered beef cattle was overdone and many of the best sons of Anxiety 4th were sent to the range. Beau Donald, one of the greatest sires of the Hereford breed, was the only calf retained for a bull by Gudgell and Simpson in 1893, and he was sold for $100.00.

A new era of good prices was noted about 1898. The W. H. Sotham sale of March, 1899, averaged $516, the highest average since 1883.[48] A number of bulls sold at high prices during 1900-1902, including Dale at $10,000, Perfection at $9,000 and Crusader at $10,000. Dale had sold for $1,000 in 1897 and for $7,500 in 1900. Another drop in beef values caused a slump in breeding-cattle prices in 1903.

The next great rise in prices came during the World War, 1914-1918. Space does not permit of any discussion of this period or of the high prices obtained for breeding cattle. The Mousel Brothers sale, January 7, 1919, made an average of $3,845, and the Warren T. McCray sale, May 21, 1919, made an average of $3,635 on 140 animals with the best 50 animals averaging $5,575. This represented the peak prices and corresponds closely with the period of heaviest beef exports and high prices for market cattle. Purebred prices tend to stay up a little longer than market prices.

The demand for breeding stock went on in 1920 regardless of the falling values of market stock. One Shorthorn breeder sold 51 head at an average of $2,096, March 21, 1920. An Aberdeen-Angus sale averaged $1,942 for 71 head, and another made $1,400 average on 121 head. A Hereford breeding establishment made a $2,749 average late in May, 1920, while another Shorthorn sale made $2,122 It was not until 1921 that purebred breeders found that the trade would no longer warrant such sale prices. The National Western Hereford sale in Denver averaged $964 in 1919; $1,484 in 1920; $475 in 1921; $379 in 1922; $403 in 1923; and $265 in 1924. Figure 12 shows in graphic form the rise and fall of Hereford sale prices from 1891 to 1927.

Rainfall and the Beef Cycle.—Some connection might be traced between beef-cattle cycles and variations in rainfall, tho the latter does not appear to be the primary cause of changes in the beef-cattle business. Henry[110] especially mentions two severe droughts in the United States in the last 50 years, in 1880-81 and 1893-95. These periods will be recognized as low spots in Fig. 10. It will also be remembered that severe droughts occurred in the West in 1922-24-25.[112] Such droughts extending only over a part of the cattle country would tend to drive surplus cattle onto the market, thus paving the way for a shortage of cattle later on. Years of abundant rainfall would, on the other hand, increase the grazing capacity of the range, and might thus increase the demand for breeding cattle.[113]

Can Cycles be Predicted?—If business cycles occur with such seeming regularity, the cattleman will desire to know whether he

can look forward with certainty to a prosperous year in 1930 or to a crisis in 1931. As a matter of fact the present rise in cattle values was predicted tentatively by Warren and Pearson in 1922. Whether for instance the peak of values can be correctly predicted within any particular twelve-month period, remains to be seen.

In the opinion of the writer, the record of these cycles is largely a record of human behavior, of how people have acted in the past and are likely to act in the future. There is always a natural tendency to over-crowd any business that is making money, until it no longer pays. The tendency then is to drop out and change to something else, thus doing away with over-production so that business becomes prosperous again. The length of this cycle seems to be about 14 years for beef cattle. The hog cycle appears to be complete in 5 to 7 years, and that of horses in 25 years. This would indicate that these cycles are governed largely by the length of time required by the country at large to build up a surplus of any particular class of livestock following a shortage.

Can Crises Be Avoided?—A knowledge that these crises do occur may prevent over-borrowing and speculation in periods of good profits. Borrowed funds are easily repaid when prices are rising, but become a heavy load when values fall. If cattlemen had realized in 1918 what was likely to happen in 1920, they would have cut down their breeding operations earlier. If bankers had understood the situation better in 1919 they would not so readily have made new loans.

Obviously the war was directly responsible for much of the trouble. All agricultural agencies were enlisted in 1917 to speed up production of food-stuffs. There was great need for all the beef that could be produced in 1917 and 1918, and increased production was assumed as a duty. The collapse of the buying power of European nations in 1920 made a more violent fluctuation in market prices than would occur in normal times. It is evident, however, from a study of history, that disaster in the cattle business can happen in peace times as well as during war periods.

ECONOMIC FACTORS

Capital

The average capital investment per farm in the United States in 1850 was $2,738 compared to $12,084 in 1920. Land had increased in value from $11.14 per acre (land and buildings) in 1850 to $69.38 per acre in 1920. Figure 13. The average increase in value has been even greater in the Rocky Mountain states. Table 4 shows the increasing valuation per farm in eight mountain states since 1850.

Table 4.—Capital Investment in Farms in Eight Mountain States and Increase in Population by Decades.[49]

Year	Population in thousands	Investment per farm in Land and buildings	Livestock	Implements and machinery	Total per farm
1920	3,336	$12,958	$2,987	$781	$16,727
1910	2,633	7,192	2,119	269	9,581
1900	1,674	3,342	2,406	186	5,934
1890	1,213	4,019	2,896	161	7,076
1880	653	2,319	2,439	137	4,896
1870	315	651	705	65	1,421
1860	174	493	703	51	1,246

Western farms have a higher capital value than those of most other sections. The west-north central states (Iowa, Nebraska, etc.) lead with an average valuation of $25,517 per farm, the Pacific states, $22,664, and mountain states, $16,727. Fifteen prairie ranches in Colorado, studied by Klemmedson in 1922, showed an average valuation of $132,409.[50] Three hundred and fifteen Great Plains ranches, studied by Wilcox, Klemmedson and McComas, averaged $41,946 each,[51] and 40 Texas ranches, $182,387 each.[52] The question of financing the cattleman is more complex now than in 1877 when land could be bought at 25 cents to $1.50 per acre. In the 70's the cattleman need only invest in a small area of land for use as headquarters and could run his cattle on free land.

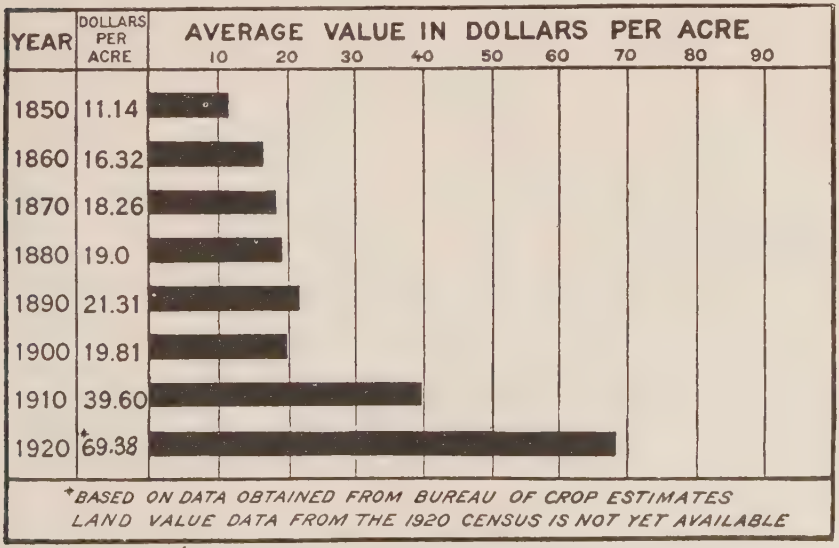

Fig. 13.—Increase in value of land in the United States, 1850-1920. From an article in the Yearbook of the Department of Agriculture, 1920. Helping Landless Farmers Own Farms. Figures for 1920 corrected to 1920 census.

McDonald wrote in 1878:[53]

> "Supposing a man wishes to become an extensive Texan stock-raiser, all he has to do is select and purchase some unoccupied, convenient spot of 20 or 10 acres, or even less, and there erect a homestead for his 'boys' and pens for the cattle at branding seasons, buy as many cattle as he chooses, brand them with an advertised brand, if not already branded, and send them away thru the woods and prairies to gather their food as best they may. Should a man desire the exclusive use of the land he legally owns, he must enclose it with a substantial fencing, otherwise his right to its pasture is only equal to the rights of his neighbors. Purchase prices ranged from 25 cents to $1.50 per acre, and even now hundreds of thousands of acres might be bought at less than a dollar an acre."

Bentley[54] reports an instance where a Texas cowman appeared on the Fort Worth market in 1882 to sell "range rights" to 100,000 acres of land none of which he claimed to own. On this acreage he had 25,000 head of cattle which he also offered for sale but did not sell. Following the severe winter of 1882-83 he was only able to find 10,000 head.

Capital Investment per Cow Unit.—In 1923, Klemmedson found that the investment on 15 prairie ranches in Colorado was approximately $154 for each breeding cow.[50] Fifteen ranches in northwestern Texas, carrying 38,511 head of cattle, showed a total interest charge of $11.80 to $15.29 annually on the investment necessary to carry one breeding cow per year.[55] This was not necessarily paid out since $6.00 to $7.55 of this was on the owner's capital.

Table 5.—Investment and Interest on Investment for each Breeding Cow Handled—15 Ranches, Texas, 1920-1922.

	——1922——		——1921——		——1920——	
	Interest	Capital	Interest	Capital	Interest	Capital
Land at 7 percent	$ 7.23	$103.29	$ 8.42	$120.29	$10.09	$144.14
Cattle at 8 percent	3.95	49.37	4.07	50.75	4.39	54.75
Running expenses and equipment at 6 percent	0.62	10.33	0.65	10.83	0.81	13.50
Total	$11.80	$162.99	$13.14	$181.87	$15.29	$212.39

There was, therefore, on each 100 head of breeding cows, a capital investment of $16,299 to $21,239. This does not include $2.13 per cow, paid as rental on leased land. Where much of this capital was borrowed, ranchers found themselves seriously involved when prices fell in 1920.

Interest.—Why do we pay interest? The paying of interest has persisted thru past ages regardless of opposition. About 1540, English law first legalized the taking of interest.[56] However, "any-

Fig. 14.—A modern Hereford ranch near Roggen, Colorado, 1927. Much more capital is now required to start in the cattle business than when the owner established this ranch in 1882. Photo by Hollard.

one taking more than 10 percent was to forfeit treble the value of the wares sold and should suffer imprisonment or be fined.'' This act repealed a law which had been in force 50 years prohibiting under severe penalties the taking of interest.

The paying of interest would not have survived as an economic practice, unless borrowers had found it to their advantage to pay it. Both parties must profit in a business transaction. Interest is in a real sense a premium or inducement offered by the prospective borrower to a possible lender to persuade him to advance the loan. The following paragraphs on interest can be better understood if this point is kept clearly in mind.

Factors Affecting Interest Rates.—Why are interest rates low on savings bank deposits, and high on cattle loans? Cattle loans are reported bearing 12 percent interest. The rate of interest paid by savings banks is generally around 3 or 4 percent. Investors owning gilt-edged bonds are often satisfied if they can get 4 or 5 percent. Government bonds may pay only 3 percent. Investors in mortgages may receive 6 percent or less. If 5 percent is an average interest rate received by the investor, why does the cattleman pay 8 percent or 10 percent?

Distance from Sources of Capital.—Interest rates on first farm mortgage loans in 1921 ranged from 5.21 percent in New Hampshire to 9.52 percent in New Mexico.[57] Other factors than distance probably enter in this case, but distance is a deciding factor as shown in Figures 15 and 16. Interest rates are noticeably lower in the East than in the West and South. The East has a surplus of capital but bankers as well as private individuals prefer to invest their money near home. Financing agents have a better knowledge of farming

and business conditions near at hand and the costs of inspection or foreclosure are less. This means that the communities most in need of capital have to pay most for it. Figure 16 shows how this principle applies in Colorado. The Colorado map shows a reasonably close relation between the interest rates charged and the proximity of the counties to Denver.

Character and Ability of Borrower.—A man of good moral character, of proved ability as a business man, and with a good record for paying his debts will get the best consideration when asking for credit. A successful feeder may get better terms than can a beginner. Of greatest importance is the possession of good security—land, stock or equipment, etc., to back up the loan.

Ease of Liquidation.—Investors will usually take a lower rate of interest if they can get their money easily when they want it. Banks use our bank deposits without interest because we want liberty to withdraw our money without notice. If the same money is put in a savings account it may draw 3 or 4 percent interest, but the bank reserves the right to a certain amount of notice before paying. A man may invest his money in a mortgage drawing 6 percent but his money cannot be readily obtained again until it is due. The cattleman cannot use a loan that has to be paid on short notice, but requires a loan period of 6 months to a year or more, and has to pay a relatively high rate.

Payment for Risk.—Part of the interest rate may be payment for risk. Creditors protect themselves by raising the interest rate sufficiently to cover losses. Wright[58] lists 12 factors affecting interest rates to farmers, 5 of which have to do with risk. These include natural and climatic conditions, distance from financial centers, personal character of the borrower, type of farming followed, and the purpose of the loan. A similar discussion is given in the Department of Agriculture Yearbook for 1924.[59]

Higher interest rates are charged in regions of insufficient rainfall or cold climatic conditions, or in localities noted for poor soil, or one-crop farming.

Banks usually charge a lower interest rate on feeder loans than on stocker loans, because they are considered more safe. Altho interest rates were high in the early days of the western cattle industry, John Clay states that the rates were not high enough to protect investors against loss.

Commissions.—A considerable part of the interest rate that the borrower pays is the wage of the banker or other agent who secures the capital, makes the loan and handles all details. This middleman

is at considerable expense for office rent and equipment. He must hire able and trustworthy employees and must make a living for himself if he is to continue in business. This expense of handling loans is about 1½ to 2 percent.

This service charge is sometimes added as a "commission," "fee" or "bonus," especially where state law limits the rate of interest. If the legal interest rate is 8 percent, and the loan agent has to pay 8 percent for the money he handles he will charge the borrower 8 percent plus a commission or bonus which may be 2 percent. The commission is usually collected when the loan is made, by being substracted from the principal. The cattle-loan rate in the 80's is reported as having been 1 percent a month with commissions, which sometimes brought the rate up to 15 percent a year or more.

Why Does the Middleman Get a Commission?—Why pay a middleman to do this work instead of going directly to the investor. One may do so if he can. One cattleman claims that he could always go back East in the early days and get money at 5 percent when others were paying 8 percent and 10 percent. The man with money to lend may make his own loans at the higher rate and accept all the trouble and responsibility, or he may accept a lower rate of interest and let an agent do the work. The cost of service enters into the interest rate whether it goes to a banker or loan agent, or whether the original investor gets it for himself.

How the Current Interest Rate Is Determined.—Interest is in one sense a price of a certain service or accommodation. The fixing of the interest rate in any one section and at any one time will be according to the law of marginal price. That is, it will tend to be what the last successful lender is willing to accept as interest and what the last borrower is willing to pay. The productivity of the capital borrowed will finally determine what the lender will accept as interest and what the borrower will pay.

A cattleman in the 70's was able to pay 18 to 25 percent for loans while he could make 30 to 40 percent on the money. When, however, a cattleman borrows at 8 or 10 percent, and the productivity of his investment drops to 2 or 3 percent, then he is in trouble.

Credit

Credit as Futurity of Payment.—One feature of credit readily seen is that of **future** payment for **present** goods. This is the most easily recognized aspect of credit as when a feeder buys 100 head of steers to feed, paying part down, the rest to be paid when the steers are marketed, or when the cattleman buys a ranch for $25,000 down and a mortgage on the balance.

Uncertainty of Payment.—An important factor in credit is uncertainty of payment. The loss thru bankruptcy in America in 1922 was estimated at $148,840,809 of which amount about $100,000,000 was due to fraud. The protective department of the American Bankers Association fixed the loss from forged checks in 1922 at $50,000,000.[60]

Debtors who are fundamentally honest may be unable to pay because of business reverses, or unforseen catastrophies. Deflation and business crises cause many failures. John Clay has estimated that loan companies and bankers lost $50,000,000 on cattle loans during the depression of 1920-22.

To grant credit to a man denotes a certain amount of trust in his integrity. Prendergast[61] sums it up in the statement that "credit is the confidence that is reposed in the **ability** and **purpose** of men to meet future obligations." One complaint of cattlemen is that so many loans were made to incompetent parties in 1918 that the credit of good stockmen was consequently restricted in 1921. It is to the interest of efficient cattlemen that credit be granted carefully and that loans be well secured.

In the middle ages people had less confidence in the business integrity of their associates, consequently little business was done on credit. Gold, silver and metallic money was used almost exclusively. In the last two centuries, particularly in the last 50 years, the use of credit instruments—checks, drafts, bills of exchange, etc. —has greatly developed. Instead of hoarding money and paying cash, most Americans have bank accounts and pay by check.

Written Evidence of Obligation.—While it is not absolutely essential that credit be accompanied by a written promise to pay at a future date, commercial credit is based on such written evidence as notes or other credit instruments. A bankable note is one that is sufficiently well secured either by mortgage or by bill of sale or by the endorsemnt of a responsible party that a banker will feel justified in advancing money on it.

Credit as Classified by Length of Loan.—Credit is commonly divided into short-time credit, intermediate credit and long-time credit. Short-time loans as ordinary mercantile loans usually run 30, 60 or 90 days or not over 6 months. Most bank loans are made for periods not to exceed 90 days. The source of funds for short-time credit is the bank deposits held by banks.

Long-time credit refers to mortgage credit as on land or other real estate. The money put into such loans comes from trust funds or similar investment funds. In long-time credit the investor does

not want his principal back on his hands but wants a safe investment well secured on which he can depend for an income. Such investments pay a lower rate of interest than do short-time investments because they are considered to be more secure, also because the investor does not so frequently have to seek for new investments. Long-time loans may be said to be those that run for periods of 3 to 5 years and over. Intermediate credit such as cattlemen need most, has not been developed to the extent that we have developed mercantile credit and mortgage credit. A loan period from 1 to 3 years is too long for the banker and too short for the investor of trust funds, insurance funds, etc. It is to organize such intermediate credit for the stockmen that the Agricultural Credits Act was passed in 1923.[58*-59*]

Ranch Indebtedness.—The average debt on 17 prairie ranches in Colorado as found by Klemmedson[63] was $15,028 on land and $12,838 on cattle. The average indebtedness for 24 mountain ranches was $5,984 on land and $16,319 on cattle, or 32.4 percent of the value of the cattle and 8.9 percent of the value of the land. Wilcox, Klemmedson and McComas[64] found on 315 Great Plains ranches an average debt of $8,543 of which $3,789 was on real estate and $4,337 was on chattel mortgages. The average debt on 96 northwestern Colorado ranches in 1925 was $17,288. See page 67. The average farm-mortgage debt in the Pacific coast states in 1920 was $10,291.

Credit Inflation and Deflation.—One of the dangers of the modern credit system is over-inflation. When business is booming, credit paper increases rapidly, giving the impression of great prosperity; tho the net result may be only an increase in price levels. Industries develop faster than actual business would warrant. When deflation occurs and prices begin to fall, the total volume of credit may contract so rapidly as to bring on a crisis.

The Work of the Credit Merchant.—If the buyer and the seller of goods are always well known to each other and if the seller is always able to extend needed credit to the buyer, there is no need for the middleman or banker. If A sells cattle to B, and B pays part down on the purchase price and gives his note to A for the balance, we might call this a simple credit transaction. If, however, A needs his money to pay ranch expenses, wages or taxes, B may have to borrow from a third party, C, and give a mortgage on the cattle so that he can pay A. But if C, who has the money to invest, is unacquainted with A or B, a fourth party, the banker or loan agent, comes in, organizes the transaction, endorses B's note, obtains the necessary funds from the investor and charges for his services.

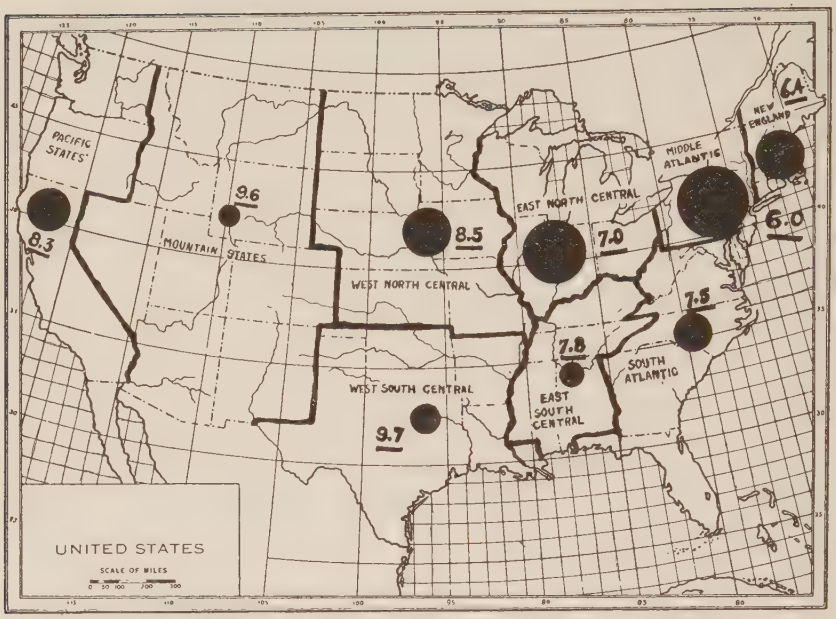

Fig. 15.—Interest rates on short-term farm loans in the United States in 1921, in relation to bank resources. Black discs indicate relative size of bank resources. Bank interest rates taken from U. S. D. A. Bulletin 1048. Interest rates rise as the supply of capital decreases.

Financing Agencies

Banks.—As previously stated (page 8) western banking did not develop until after the National Bank Act was passed in 1863-4. As noted on page 10 the first bank in Denver was the First National Bank, which opened May 2, 1865, followed by the Colorado National Bank in August, 1866. By 1885 there were six banks in Denver, five being national banks. By 1898 there were 39 state banks and 37 national banks in Colorado having a combined capital of $6,348,964, and deposits of $45,243,333.[65] By 1926 the banking resources of the state amounted to $370,061,689, with a combined capital of $18,207,000 and deposits of $312, 892,990. Banks furnish a large part of the credit used by stockmen. Figure 17.

Table 6 shows the total banking resources of the United States, December, 1924, and their geographic distribution. These resources (notes, bonds, cash, etc.) amounted to over $60,000,000,000. Of this amount over half was centralized in that small northeast corner of the country, including the New England states, New York, New Jersey and Pennsylvania. This relatively small area is the money center of the nation.

Table 6.—Distribution of Bank Resources in the United States, December, 1924.[66]

District	Bank Resources	Interest Rate on Short-time Farm Loans [109]
New England	$ 6,329,473,172	6.4
Middle Atlantic	24,568,401,967	6.0
East North Central	10,795,661,252	6.9
West North Central	5,556,997,777	8.5
South Atlantic	4,005,162,237	7.5
East South Central	1,631,954,784	7.8
West South Central	2,685,410,598	9.6
Mountain States	1,042,443.335	9.6
Pacific States	4,190,113,569	8.0
Total	$60,805,618,691	

In June, 1927, the total amount of bank deposits in the United States was $56,000,444,102.[67] Of this, approximately 10 percent represents actual currency in circulation. The other 90 percent is credit. It is the banker's business to handle this credit, which is based in some form on savings deposited with the banker. He must first of all guard the interests of his depositors. The more he can make use of this money the more he can advance industry, and the more he can make for himself and his stockholders. If he makes loans on poor security, or to wrong borrowers, or in the wrong business

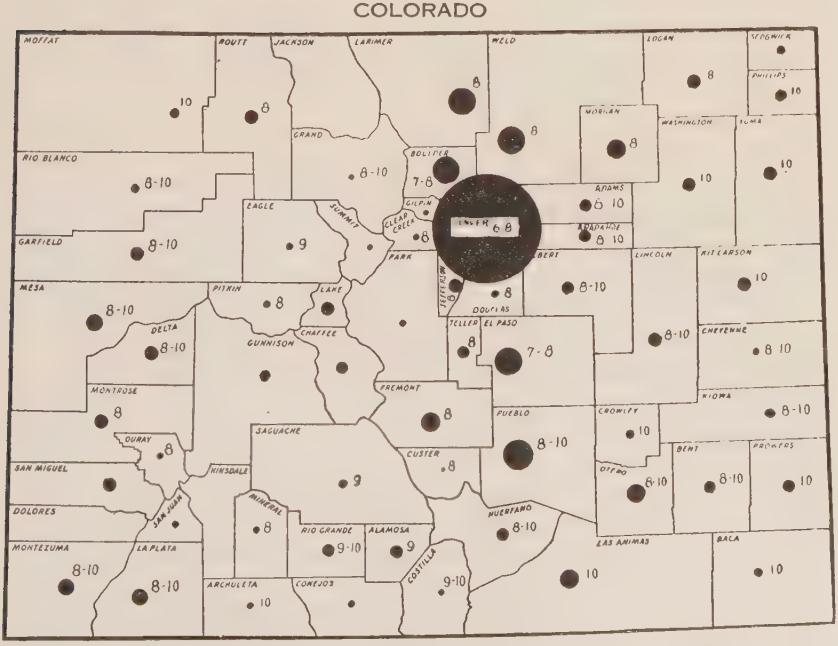

Fig. 16.—Interest rates reported on cattle loans in Colorado, in relation to bank resources by counties. Black circles indicate relative bank resources.

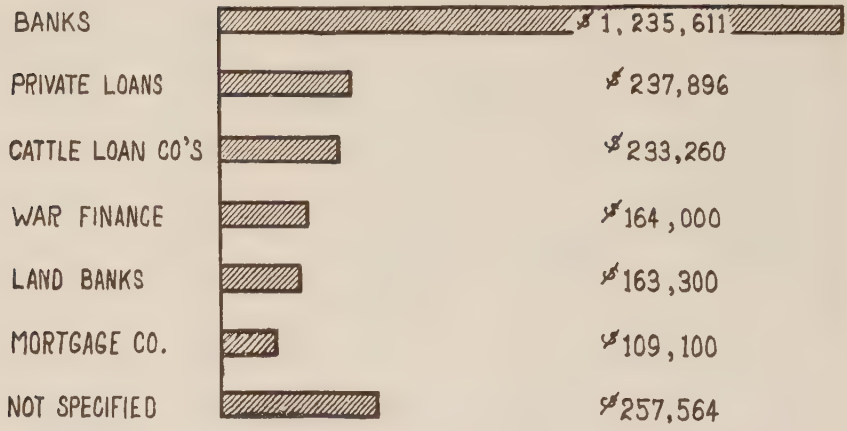

Fig. 17.—Sources of cattle loans on 97 northwestern Colorado ranches 1920-1925. Half of the total loans were made by banks.

ventures, he loses money. If he makes too many mistakes of this kind and ties up the depositors' money in uncollectable loans, his bank becomes insolvent, and both depositors and stockholders lose. He collects, in the form of interest, enough to pay a highly trained and dependable force of employees, lease or build a suitable place of business, install adequate vaults, and make as much for his own time as a man of his ability could make in any other business. In addition he must pay interest on time deposits and pay dividends on the funds advanced by his stockholders.

Few people know how much it costs to run a bank. The cashier of a certain city bank in an agricultural district estimates that for a bank with $300,000 capital and surplus, and approximately $2,500,000 deposits, the banker may expect to pay out annually about $100,000 for wages, equipment and interest on savings deposits. This is equal to 4 percent on $2,500,000 deposits. Banks reported personal and collateral loans to farmers approximating $4,000,000,000 in 1920.

The local banker is logically the farmer's best credit agent, so far as banking laws and the rights of depositors will permit. The banker is usually well acquainted with the community and with the individual farmer. He knows him frequently as a fellow member of local organizations, knows his moral and business character and the requirements of his business. The banks have in most cases aided the farmers to the limit during the last few years, carrying them along whenever there appeared a chance for them to pay off their loans. In many cases banks endangered their own business in attempting to keep their customers on their feet and became so involved in frozen loans as to become insolvent. Because of the duty banks owe

their depositors and the restrictions laid on them by law, banks connot give to farmers and stockmen the long-time credit they need.

Banks in the Agricultural Crisis.—Bank failures in the United States increased rapidly during 1920-25, especially in the western states. Table 7. During 1920-21 there were 523 bank failures, as compared to 70 in the preceding 2 years. But in the years 1923-24 there were 1191 bank failures for a total of over $400,000,000 liabilities. The 5 largest banks that closed their doors in Wyoming during the 5 years, 1920-24, did so between June 10 and December 10, 1924. Of 35 National banks declared insolvent from 1918-1924 in Colorado, Wyoming and New Mexico, 25 failed in 1924. Montana had the greater number of failures in 1923.

Table 7.—Bank Failures in the United States, in the Western States, and in Colorado, Montana, Wyoming and New Mexico, 1918-24.

	United States		Eleven Far-Western States		Colorado, Wyoming, Montana, and New Mexico
	No. of bank failures	Total liabilities	No. of bank failures	Total liabilities	No. of bank failures
1918	20	$ 5,131,887	3	$ 252,000	.....
1919	50	16,520,862	2	760,000	.....
1920	119	50,708,800	10	3,309,000	7
1921	404	173,027,776	71	28,400,490	33
1922	277	77,735,551	58	16,604,213	43
1923	578	203,739,138	135	57,046,008	114
1924	613	202,926,206	116	50,838,499	97
1925	464	164,698,516	68	37,185,676	45
1926	608	212,074,999	31	6,565,420	16

In the early years of the depression, while a large proportion of loans could not be liquidated, there was no great demand for new capital. Banks generally tried to give the cattlemen and farmers a chance to pay. Unfortunately many of the loans were based on land and cattle at 1918-19 values, and borrowers were often unable to pay even after 3 or 4 years' delay. Notes that cannot be liquidated when due are generally referred to as "frozen" paper.

How Banks Lost Money.—"A middle western state savings bank had been closed and the liquidating agent was accused of selling the bank's assets too cheaply. Assets with a face value of $272,189.12 had been sold for $48,000 and assets amounting to $181,524.74 had been disposed of to a banking investment company for $15,000. The agent testified that he had tried to sell this paper for two years prior to sale, and finally accepted the only offer he could get. 'Banks,' he stated, 'were hard hit by the drop in real estate after the war. Mortgages made on land at pre-war values melted when values tumbled.' One farm on which $10,000 had been borrowed brought $7,000 on sale. One $22,000 loan was backed only by a chattel mortgage on the borrower's livestock. In addition the bank held a real estate

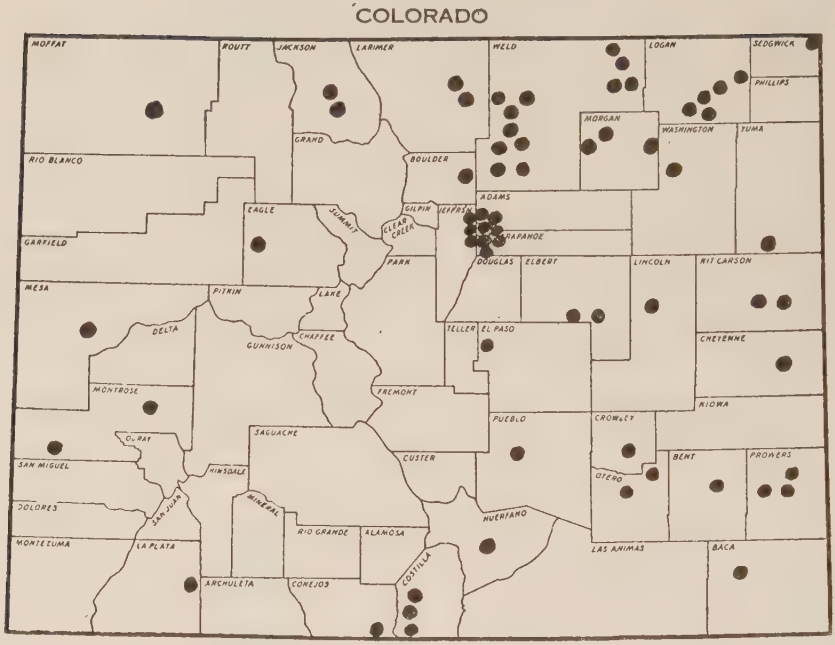

Fig. 18.—Bank failures in Colorado 1920-1925. Relatively few failures were found in the range country, most of them being in the richer irrigated areas.

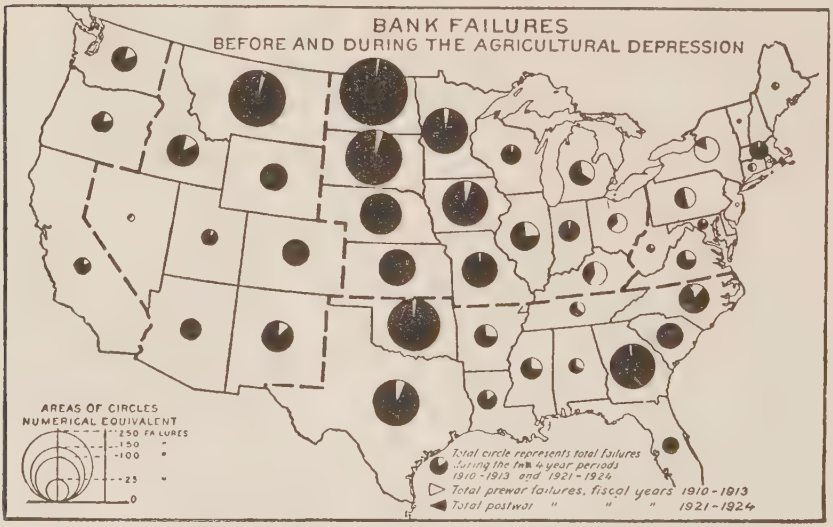
BANK FAILURES
BEFORE AND DURING THE AGRICULTURAL DEPRESSION
AREAS OF CIRCLES
NUMERICAL EQUIVALENT
250 FAILURES
150 "
100 "
25 "
0
Total circle represents total failures during the two 4 year periods 1910-1913 and 1921-1924
Total prewar failures, fiscal years 1910-1913
Total postwar " " " 1921-1924

Fig. 19.—Bank failures in the United States before and during the agricultural depression. U. S. Department of Agriculture Yearbook, 1924.

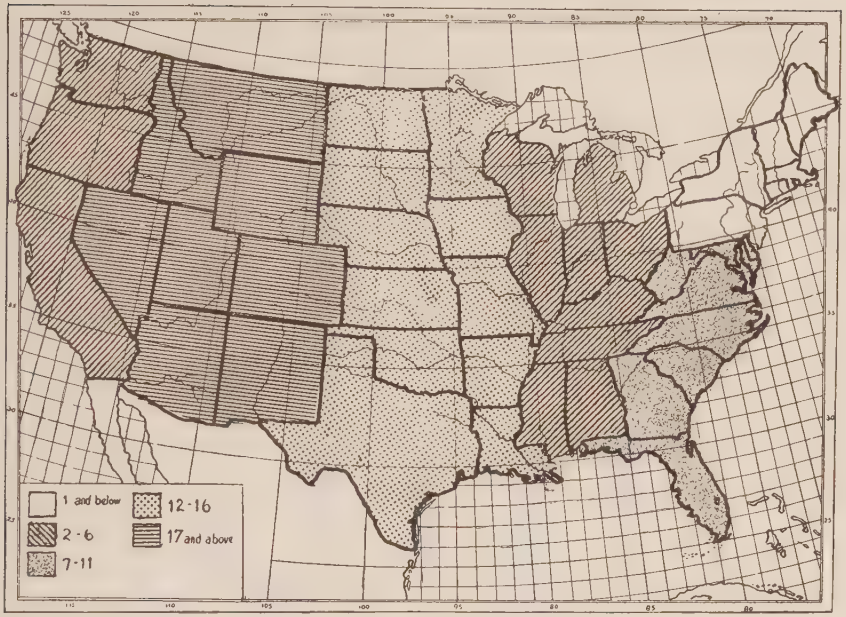

Fig. 20.—Number of bank failures in the United States in percentage of all banks in 1920. The range areas show the heaviest losses in proportion to banks open in 1920. Courtesy of Nation's Business, October, 1926.

> mortgage on the farmer's land for more than the value of the land. It was admitted that the buyers of this 'frozen' paper might double their money, if they could wait five years." [68]

Cattle Loans Not the Cause of Many Failures in Colorado.—Outside of New Mexico, cattle loans do not seem to have been responsible for a large proportion of bank failures. In Colorado bank failures were more common in the eastern farming districts. Figure 18. The Colorado State Bank Commissioner reported in 1924 that cattle loans were responsible in only five failures in state banks up to that date. He said:

> "We have probably four or five banks the closing of which was directly attributable to cattle paper when the serious decline in the market took place, but in general the cause of failure in this state may be traced directly to insufficient capital, lack of experience and over-extension of credit. The purchase of land cut considerable figure from the fact that in the dry sections of this state acreage was taken on at from three to five times its actual worth." [69]

A Wyoming bank official wrote that during the prosperous years a number of banks were organized in communities that should not have had any. He writes:[70]

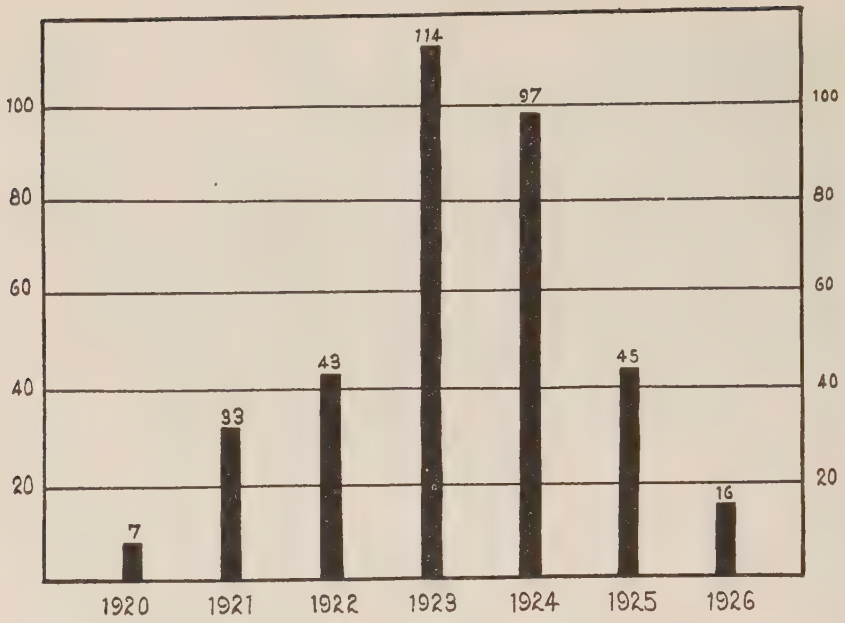

Fig. 21.—Curve of bank failures in four range states. 1920-1926.

"Many of the loans were predicated upon equities in lands valued too high; however, the serious and acute situations were brought on principally thru the depreciation of livestock from the high war-time figures. The trouble commenced during the summer of 1919 and the following winter. There was a drought thruout the state in the summer of 1919 and a very severe winter followed. This resulted in a lack of feed locally which necessitated the importing of hay and grains at heavy cost. Very many were forced to ship their stuff out of the state to other feed localities. In the main, this was costly and resulted in heavy winter losses. Those who remained in Wyoming with their herds and flocks also suffered severe winter losses. Then during 1920, the depreciation in value set in, which, on top of the decimation of the herds and flocks, resulted in loans being carried with little margin and more frequently with no margin at all.

"The banks endeavored to carry along under this burden and had there been any appreciable enhancement in values of cattle in particular, many of the loans would have worked out with less disaster to the financial institutions."

In New Mexico the cattlemen were hit by drouths and many herds had to be shipped out of the state. The New Mexico bank examiner blames particularly the high prices put on stock ranches during the inflation, as the main cause of bank failures in that state.

The Federal Reserve System and the Agricultural Crisis.—The Federal Reserve System went into operation just before the outbreak of the European war and possibly prevented a serious panic in 1920. The Federal Reserve Board has been criticised for increasing discount rates on April 19, 1920, and supposedly bringing on the depression. Opinions are divided as to whether this was to any extent responsible. The Congressional Joint Committee of Agricultural Inquiry in 1921, found that before April 19, 1920, 14 Kansas City banks and 9 Omaha banks were absorbing 73 percent of the normal lending power of the Kansas City Federal Reserve Bank, leaving only 27 percent for the remaining 1,063 member banks in the district. The effect of the progressive rate ruling was to reduce the borrowing of these banks and to increase the borrowing of country banks in the district.

Between May 4, 1920, and April 28, 1921, after the progressive discount rates had been in operation 1 year, the borrowings from Federal Reserve banks by agricultural districts had increased 56.6 percent, while in non-agricultural districts borrowing had decreased 28.5 percent.

Table 8.—Federal Reserve Discounts on Livestock Loans and Other Agricultural Paper, 1917-1924.

Year	Livestock paper	Other agricultural paper	Total agricultural paper
1917	$ 7,700,000	$ 8,600,000	$ 16,300,000
1918	27,300,000	29,400,000	56,700,000
1919	26,200,000	24,800,000	51,000,000
1920	103,800,000	143,100,000	246,900,000
1921	49,700,000	129,000,000	178,700,000
1922	21,700,000	63,500,000	85,200,000
1923	17,500,000	52,700,000	70,200,000
1924	3,100,000	26,100,000	29,200,000
Total	$257,000,000	$477,200,000	$744,200,000

Land-Mortgage Credit

A small proportion of cattle loans is made with credit based on land as the only security. In Utah only 4 percent of Federal Land Bank credit was used primarily to buy livestock.[71] However, a large number of cattle loans are secured in part by land mortgage. Land is considered ideal security because it is practically imperishable and because it does not normally lose value.

Land Mortgages Financed with Investment Funds.—Land-mortgage loans are usually made from investment funds, where a steady income from interest is the object and where safety or security is essential. Insurance companies and trust companies put a large amount of their funds into land mortgages. Land loans are made

for longer periods of time than are loans on chattels or on personal notes.

One of the chief advantages of borrowing with land as security, is that the rate of interest is relatively low due to the greater security of land as collateral, and partly because investment funds rather than bank deposits are the source of the loan. Loans made on land in northwestern Colorado had an average interest rate of 6.6 percent, as compared to 8.4 percent on loans made on cattle.

The Federal Farm-Loan System.—The Federal Farm-Loan Act was approved July 17, 1916, and the loan system thus provided for began operations in March, 1917. The act was the concrete result of investigations extending over a period of 8 years and embodied 3 important features: Long-term mortgages; amortization of debt; and cooperative purchase of capital stock by the borrowers.

Farm-loan associations are formed locally. After being chartered, the local association can make loans to other applicants. Ten actual farmers wanting to make loans on land which they expect to operate themselves can form an association. Five percent of the loans made must be invested in stock of the Federal Land Bank of that district, and loans may be made only to members. Individual loans can be made up to $25,000. Total loans must be at least $20,000 to start the association.

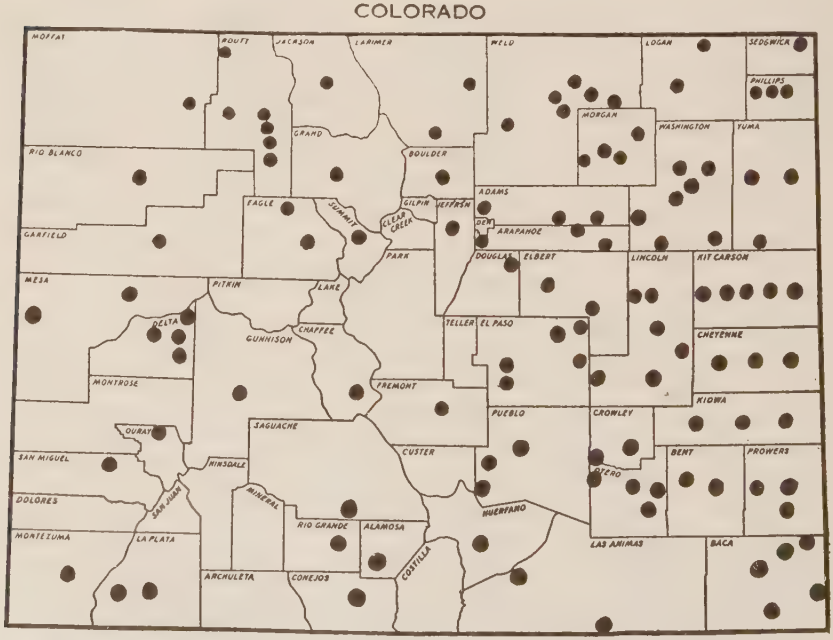

Fig. 22.—Distribution of national farm loan associations in Colorado, 1925.

Joint Stock Land Banks are operated in much the same way, but the capital stock may be owned by outsiders and borrowers do not need to purchase stock. Individual loans may be made up to $50,000 and the total amount of loans must not exceed 15 times the capital and surplus.[72-73]

Amortization.—Amortization means paying off a debt gradually by small amounts along with the interest payments. On an ordinary $1,000 loan, straight interest at 6 percent would in 34 years amount to $2,040, and the principal would still be unpaid. With a $1,000 amortization loan the borrower paying 7 percent per year, 6 percent interest and 1 percent principal the loan would be paid off in 34 years, and the total amount paid would be only $2,338.16.[74] Speaking of 8 percent interest rates, the Saskatchewan Department of Agriculture states:[75]

> "If our farmers could borrow money for 2 percent less than what they now pay, they could, by making payments on the amortization plan, discharge their indebtedness in about 24 years' time, by simply continuing to pay what they are now paying for interest alone."

Length of Loan Period.—Under the Federal Farm-Loan system the borrower can select any term of years he needs, from 5 up to 40 years. On a long-term amortization loan the borrower pays regularly little more than interest, but on any regular installment date may make as many payments ahead as he wishes.

The Rate of Interest.—Federal Farm Loans cost the borrower not more than 1 percent above the rate paid by the Farm-Loan bonds. These bonds have sold readily to the investing public. If the bonds are sold at 4½ percent the interest rate can not be above 5½ percent. It is because of the safety of these Federal Farm-Loan bonds that the interest rate is kept low.

Morman credits the Federal Farm-Loan system with having lowered the average farm-mortgage interest rates of 1915 from .1 percent to 2.4 percent by 1920 in states that previously had rates over 6 percent. In the western states the reduction was from .8 in California to 2.41 percent in New Mexico. Another effect has been the abolition of annual commission charges, which in some states were as high as 1.8 percent in 1915.[76]

The Federal Farm-Loan System was represented in Colorado by 117 Farm-Loan Associations (December, 1924) and by one Joint Stock Land Bank. The distribution of Farm-Loan associations over the state is very uniform. Outstanding loans in Colorado reported by the Federal Land Bank of Wichita were 7,598 in number for a total of $22,517,600.

Fig. 23.—Denver Union Stockyards Exchange Building. The cattle-loan companies developed largely around the large packing centers.

Cattle-Loan Companies and Commission Companies

The establishment of modern packing centers was a necessary part of the organization of the nation's meat industry. With this organization there developed two types of financing agencies. First were the commission men, who handled the work of financing the cattle feeders in addition to their regular work. Second were the cattle-loan companies which appeared about 1897 or 1898, and were to a large extent backed by the packers.

The following article, which appeared in the Daily Drovers' Telegram at Kansas City in 1898, gives a good account of the cattle-loan business as developed by the commission men.[77]

> "One of the most potent factors in the development of the Kansas City livestock market has been the liberal loaning of funds to farmers and feeders on what is known as 'cattle paper.' Conservative men, a few years ago, discovered that the average western farmer was a man of honesty and wonderful industry. They discovered that the yearling steer worth $15.00 on the rich grasses of the western plains would be worth $30.00 at 3 years old, and when fattened for market on the farmer's corn, would sell for $50.00. They reasoned that instead of a shrinkage in value of securities there was an increase. The ranchman had the steer and wanted the money. The farmer had the corn and wanted the steer, but did not have the money. Capital came in and proposed to loan the farmer the money to buy the steer, taking a mortgage on the steer and corn. 'Cattle

paper' was discovered. Investors were doubtful and cautious at the start, obligations were, however, met with surprising promptness and cattle paper continued to grow in favor."

John Clay, of John Clay Commission Company, who began in the cattle-loan business in 1883, has remained in cattle-financing work down to the present time.

Cattle-Loan Companies.—Modern cattle-loan companies came into prominence after 1898-99. It was largely packer money that made up the capital of the new loan companies. Phillip D. Armour is credited[78] with starting the first of the packer-loan companies at Omaha in 1896. G. F. Swift became associated with the St. Joseph Cattle Loan Company at about the same time. The failure of a number of commission companies in 1898 had made cattle paper temporarily hard to sell and the commission companies had reduced their loans materially. There seemed to be an opening for a new credit agency to meet the financial needs of the cattleman and market his loans.

The packers were becoming well established and saw an opportunity to invest some of their earnings in an enterprise that would further aid and develop the industry. A good cattle-loan company would naturally tend to draw trade to the packing center where it was located.

Advantages of the Cattle-Loan Company.—One can best understand a cattle-loan company by comparing it to a bank. Like the banker the manager of a cattle-loan company is a credit merchant or broker acting between the borrower, who may be in New Mexico, and the investor, who may be in New Hampshire. The cattle-loan company gets its original capital from shareholders in the same manner as does a bank and markets its loans to investors or banks in the same way. Unlike a bank the cattle-loan company has nothing to do with the acceptance of deposits or the issuing of bank notes.

Cattle-loan companies were considered to have several advantages over banks. They were not restricted to a certain size of loan (10 percent of capital and surplus) to one individual, as are national banks. In a bank with $50,000 capital this means a loan limit of $5,000 to one borrower, while a cattle-loan company having the same capital could put out $50,000 or more in a single loan. The cattle-loan companies were of great assistance to banks in handling the larger cattle loans. The stockholders of a cattle-loan company are liable for only the amount of stock they hold, while the stockholders of a bank are held for double the amount of their stock in case of failure.

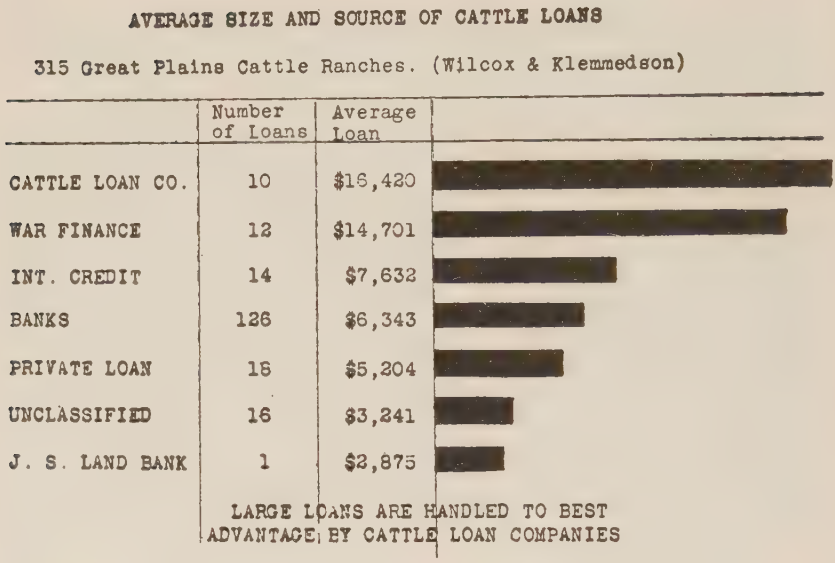
AVERAGE SIZE AND SOURCE OF CATTLE LOANS
315 Great Plains Cattle Ranches. (Wilcox & Klemmedson)
Number of Loans
Average Loan
CATTLE LOAN CO. 10 $16,420
WAR FINANCE 12 $14,701
INT. CREDIT 14 $7,632
BANKS 126 $6,343
PRIVATE LOAN 18 $5,204
UNCLASSIFIED 16 $3,241
J. S. LAND BANK 1 $2,875
LARGE LOANS ARE HANDLED TO BEST ADVANTAGE BY CATTLE LOAN COMPANIES

Fig. 24.—Cattle-loan companies were accustomed to handling larger loans in proportion to their capital stock than could the banks. The heavy losses sustained by the cattle-loan companies were partly due to their larger loans.

How Loan Companies Operate.—Cattle paper is obtained thru commission companies, from cattlemen or from banks. It is estimated that about 15 percent of cattle loans are made direct to the stockmen, usually to the larger operators. Most of the loans come thru the country banks. When these smaller banks reach the limit of their loaning power they must discount (sell) some of the loans they have made so as to be able to take care of other customers and provide adequate credit facilities for those that come afterward. The cattle-loan companies take this surplus cattle paper, or may pay the banks a commission and make the loans to the cattlemen direct. The livestock commission companies bring considerable business to the cattle-loan companies.

Who Buys Cattle Paper?—Cattle paper may be disposed of to banks, or to private investors. To make easy the disposal of cattle paper, large loans may be made in several separate notes. A chattel mortgage may be made to cover the entire loan and a certificate of such mortgage given to each purchaser of a note.. Local country banks, not in cattle territory, will often take good cattle paper as an investment. Newman reported that[81] Chicago savings banks bought large amounts of cattle paper (1920-22). The margin or spread between interest received and interest paid varies from ½ percent to 3 percent, the majority running from 1½ percent to 2 percent.

Making Loans Safe.—Larmer makes the statement that the strength of a cattle-loan company is not in its capital but in its methods. A cattle-loan company cannot escape loss unless correct methods are followed in making loans. Probably no company could have avoided loss in the depression of 1920-22, yet a considerable part of the losses incurred since 1920 were the result of careless methods of making loans in 1918-20. A recent analysis of loan-company methods made by Victor A. Newman of Kansas City, mentions good margins, careful inspections and requirement of an income statement as the main factors of safety in making loans.

Forms used by the loan companies vary in detail but are fundamentally of the same general type. They are designed to give a complete account of the financial or business standing of the applicant for a loan, his property and outstanding indebtedness, feed supply, grazing land, water or leases. These show the company that the borrower has sufficient capital to make good any possible losses, and indicate also his business capacity and ability. The financial statement is needed for discounting notes with the Federal Reserve Banks. A brand sheet is usually filled out giving the number, brands and location of all cattle to be put up as security, and the brand book in which these brands are recorded. A confidential report may then be obtained from any local banker or business associates as to the general standing of the applicant as a good moral risk. The county clerk may be asked to check on the applicant's financial statement as to mortgages, titles and ownership.

The final report is that of the inspector, who may be a local man or a special employe of the company. This man must be experienced, well trained, capable and honest, and must know cattle grades and values. It is his duty to check on the count, brands, grades and values of the cattle, their weight and condition, the amount and character of the visible feed supply, and the general appearance of the applicant's farm, feed yard or ranch.

Margins and Collateral.—Feeder loans are often made to the full purchase price of the steers; provided the borrower has sufficient feed for finishing. Loan companies may or may not demand a chattel mortgage on the feed and equipment, depending on the reputation and ability of the feeder and the condition of the market. They may demand the right to take charge of the cattle and feed them, if the owner proves to be incapable or neglectful, and also the right to call for more security, if needed. The reason that little margin is demanded on feeder loans is that the cattle are expected to gain in weight and in value per pound during the feeding period, and this is usually sufficient to offset any losses or drop in market price. Also

as feeder cattle are kept in feedlots and yards they are better protected against theft or straying and are more readily checked by the inspector. Out of 56 banks checked by Newman, 13 required no margin other than feed, 15 required 10 to 20 percent margin, 12 asked for 25 percent margin and the remainder from 35 percent to 50 percent.

Stocker loans are considered less safe than feeder loans and therefore, are not so readily sought. They have to run for longer periods of time, it is more difficult to make inspections, and there is more chance for loss from storm or drouth than in the feedlot. If the cattleman is a good operator, has plenty of grass, and if there is a reasonable margin on the loan, a loan on such security is sound. Plenty of grass is the main requirement, with enough feed in reserve for winter. Much of the loss in winter and spring is due to over-grazing in summer and fall. Newman reports that a majority of banks require a margin of value of over 40 percent on stocker loans. In the mountain states it is often 50 percent or more.

Value of Cattle Paper as an Investment.—During the years 1916-1920, when the total amount of cattle paper was increasing rapidly and money was greatly in demand for investment in other lines, many articles were written advertising cattle paper as a safe investment. A widely quoted statement of President Wilson's was that:

> "cattle are just as visible and tangible as goods in the warehouses and goods on trains. Credit based on cattle is just as good as credit based on bills of lading."

Events of the following years showed that some cattle were neither visible nor tangible, when needed. One reason advanced was that beef would always be wanted by the American people. The safe methods of the cattle-financing agencies were much stressed as a point in favor of the cattle paper, as the cattle-financing agencies had suffered extraordinarily small losses for many years. One company reported .00025 percent loss on loans, another .00043 percent loss. Another had no overdue loans in several years, while one company had loaned $20,000,000 in 3½ years and lost only $600. Only a few years later some of these same companies lost millions and were forced to liquidate.[82 83 84 85]

Cattle paper when backed by a sound company is still a safe investment. In feeder loans this is due to the gains of the animals and in breeding-cattle loans, is due to the increase in young stock.

The best evidence of the security of a cattle loan is the endorsement of a good company, bank or commission firm that is known to use sound business methods and that makes loans only to reliable stockmen. The losses of 1921-23, during the depression, should not

be held against the cattle-loan business. The cattle-loan companies stood back of their endorsement thru these years, taking losses of millions of dollars, which was good evidence of their business integrity and strength.

Many of the cattle-loan companies were making no loans in 1925 and were practically liquidated. Those still making loans report a smaller volume of loans outstanding than usual owing to a plentiful supply of money in the banks.

One of the smaller loan companies reported $1,800,000 in loans in 1919, compared to $800,000 in 1925. The feedlot loans amounted to 25 percent of total cattle loans in 1919, one third in 1920, 50 percent in 1922, 65 percent in 1923 and 1924, and 80 percent in 1925 It was practically impossible to dispose of any but feedlot paper after the drop in prices. One of the larger companies reported $6,000,000 loans of which 50 percent were feedlot loans, 30 percent summer-grazing loans and 20 percent breeding-cattle loans. An official in another company reported that in his opinion 50 percent of the loans made by some of the older companies were breeding-cattle loans.

A leading official in a Chicago cattle-loan company, writing in 1927, makes the following comments which are worth remembering:

> "In the light of developments over the past few years, what was thought to be an advantage of a cattle-loan company over a bank has proved a distinct disadvantage. The fact that their loans are not restricted in size was largely responsible for the cattle-loan companies' failure. Many loan companies had three to four times the amount of their capital invested in a single loan. Had they been restricted as banks are to a maximum limit of 10 per cent. of their capital and surplus, or 25 per cent. at the most, I am sure that the casualties among loan companies would have been very small.
>
> "The fact that cattle loan companies were operated in connection with a bank with the same corps of officers, proved also a boomerang which in some instances caused the failure of banks or heavy losses to the stockholders. When the money market tightened up and the loan companies could not find an outlet for their paper fast enough, the managers took the easiest course and allowed the bank to take up the maturing paper, expecting to place it elsewhere at once. This in some cases was not possible and resulted in the bank's being loaded up with a large amount of cattle paper, some of which became 'frozen.'
>
> **"Inspection.**—One of the weaknesses of the old cattle loan company was the superficial manner in which the loans were inspected. Many instances are known where an inspector has called the borrower on the telephone from his hotel to ask him how many cattle he had and certain other questions, such as feed, water, etc., and has then filled out an inspection report and sent it in to his office.

"Inspection of range loans is a tedious procedure and is physically impossible except at certain seasons of the year. The conscientious inspector should qualify his report rather than mislead his principal and the creditors by a report which is inaccurate."[86]

Since the depression of 1921-24, a number of the cattle-loan companies have gone out of business, including some of those which were considered the strongest and most successful in 1918. Whether other companies will be organized in the future as the cattle business improves is a matter of conjecture.

Emergency Financing Agencies

In 1921 the situation of the range cattlemen was worse than in 1920, and immediate financial aid was necessary if worse trouble was to be avoided. Banks were holding millions of dollars in cattle paper which could not be taken up. Loans of $60 and $70 per head had been made on cows worth $80 and $100 at the time, but now worth $40 or less. Fat cows worth $10 per cwt. in Chicago in June, 1920, were worth just half that much in June, 1921. On the Denver market feeder prices had taken a similar drop from $10.25 in 1920, to $5.50 in 1921. Attempted liquidation would have driven prices still lower. Stockmen and bankers began to plan emergency measures to alleviate the situation. The Stockgrowers Finance Corporation or Morgan Pool, was capitalized at $50,000,000. This corporation proposed no new loans to stockmen, but was to take over cattle notes held by the banks and loan companies. This saved the cattlemen from having these notes called in.[87]

"New York banks offered to furnish dollar for dollar with the rest of the country up to $25,000,000. There was some little difficulty in obtaining the subscriptions outside of New York, but it resulted in subscriptions being obtained from 208 banks in 18 cities."

The amounts loaned on stock were suggested as follows: For cows, $20 to $35; yearlings, $15 to $30; two-year-old steers. $30 to $45; three-year-old and older steers, $45 to $70; bulls, $40 to $75; calves, $10 to $20; sheep, $2 to $5 per head. Out of approximately $14,000,000, $13,500,000 had gone to western range states. The principal states receiving assistance and the amounts loaned were as follows:

Texas	$6,471,414.73
Wyoming	1,398,020.92
New Mexico	1,393,583.78
Montana	1,122,065.99
South Dakota	718,425.43
Arizona	671,599.17
Colorado	563,508.17
Idaho	508,906.40

No new loans were made after December 1, 1921, tho borrowers were allowed to renew their loans up to 30 months in 6-month periods.

The total amount loaned by the Stock Growers Finance Corporation was a little over $20,000,000, and a little over $500,000 was still outstanding in November, 1925. M. L. McClure estimated in 1925, that the losses to the contributing banks would be several hundred thousand dollars, if interest were included. Mr. McClure wrote in 1925:[88]

> "It is expected that each bank will receive a little more back than it put in, but not sufficient to pay the rate of interest that was agreed upon. In 1921 the banks had all they could do to look after their own clientele and it was largely a matter of welfare work that these banks made up the pool for the purpose of assisting the livestock industry. They did not do this with any hope of profit."

The War Finance Corporation

This corporation was first organized in 1918 to provide credits for war industries. In August, 1921, the powers of the corporation were enlarged to let it function as a rediscount agency for agricultural and livestock loans. This amendment was passed as the Agricultural Credits Act of August 24, 1921. A working capital of $1,000,000,000 was subscribed by the United States Government. The corporation was empowered to make advances to banks, bankers or trust companies or any cooperative association of producers, "which may have made advances for agricultural purposes, including the breeding, raising, fattening and marketing of livestock,"[89] or that had discounted or rediscounted such notes, drafts or bills of exchange for that purpose. Such notes had to be sound and marketable. The War Finance Corporation had the power to make advances on the full face value of such paper for a period of not over 1 year, and such advances could be renewed for a total period of not over 3 years. Banks getting such advances could charge not over 2 percent more interest than the rate charged by the corporation. On October 1, 1921, the corporation rate was made 5½ percent on all notes, which were for 6 months or less without renewal. All other advances were at 6 percent. The banks and other agencies could not charge over 8 percent.

Agricultural and Livestock Loan Companies

To utilize this $1,000,000,000 fund more rapidly, a number of emergency livestock loan associations were formed. These took the place of banking institutions in handling the notes of the individual stockmen. A reason for the formation of these associations was that the banks did not seem to be handling the loans with sufficient dispatch.[90]

Capitalization of Livestock Companies

Some of the state livestock loan companies and their original capitalization as listed in the November issue of The Producer were: Blackfoot, Idaho, $100,000; Tucson, Arizona, $200,000; Florida, $250,000; Denver, Colorado, $500,000; Fort Worth, Texas, $1,500,000; Hutchison, Kansas, $1,000,000; Albuquerque, New Mexico, $500,000. Other loan companies were formed in Utah, Wyoming, Montana, Nebraska, Oklahoma, South Dakota and Oregon. These livestock companies could accept livestock paper up to 10 times their capital stock. The Bankers' Loan Company organized in Salt Lake City started on $100,000 subscribed by the clearinghouse banks of Salt Lake City, and required every borrower to put into capital stock one-eighth of his loan, thus forming a continuous capital reserve.

Summary of War Finance Corporation Report, 1924

The War Finance Corporation came to an end as an active factor in livestock financing, at the close of 1924. The only work remaining after that date was the extension and liquidation of old loans.

Table 9.—Loans in Ten Western States to Banks, Cattle Loan Companies and Co-operative Associations to 1924. War Finance Corporation.[91]

State	To banks, etc.	To livestock loan companies	No. of loan companies	Total including co-operative associations
Texas	$ 5,707,553.13	$22,281,329.01	26	$ 28,640,627.51
Colorado	1,860,055.46	10,390,819.41	17	12,250,874.87
Montana	7,761,606.23	4,170,316.62	5	13,270,798.87
Utah	10,323,000.00	2,598,756.00	2	12,921,755.00
Wyoming	248,267.69	11,155,258.60	5	11,403,526.29
New Mexico	345,076.94	9,165,636.92	4	9,510,713.86
Oregon	1,599,009.85	5,104,134.30	8	6,703,144.16
Idaho	1,073,475.97	4,489,350.02	7	5,583,850.92
California	203,320.00	2,477,781.29	3	5,541,749.59
Arizona	395,466.08	4,066,837.70	6	5,163,921.20
Total	$29,516,831.75	$75,900,218.87	82	$110,990,962.26

Out of $92,899,036.47 loaned to livestock-loan companies, $75,900,218.87 or 81.7 percent was loaned in 10 western states. Out of 114 livestock-loan companies receiving loans, 82 were in these states.

The Colorado cattle-loan companies to which advances were made were the American Live Stock and Loan Company, Denver; Denver Cattle Loan Company, Union Stock Yards, Denver; Deer Trail Live Stock Loan Company, Deer Trail; Drovers Cattle Loan Company, Denver; Feeder Loan and Investment Company, Fort Collins; Gates Brothers Cattle Loan Company, Union Stock Yards, Denver; Hersch and Catchpole Company, Pagosa Springs; J. J. Harris and Company, Dolores; Holly Sugar Corporation, Colorado Springs; Golden Cycle Building; Live Stock Finance Corporation, Union Stock Yards, Den-

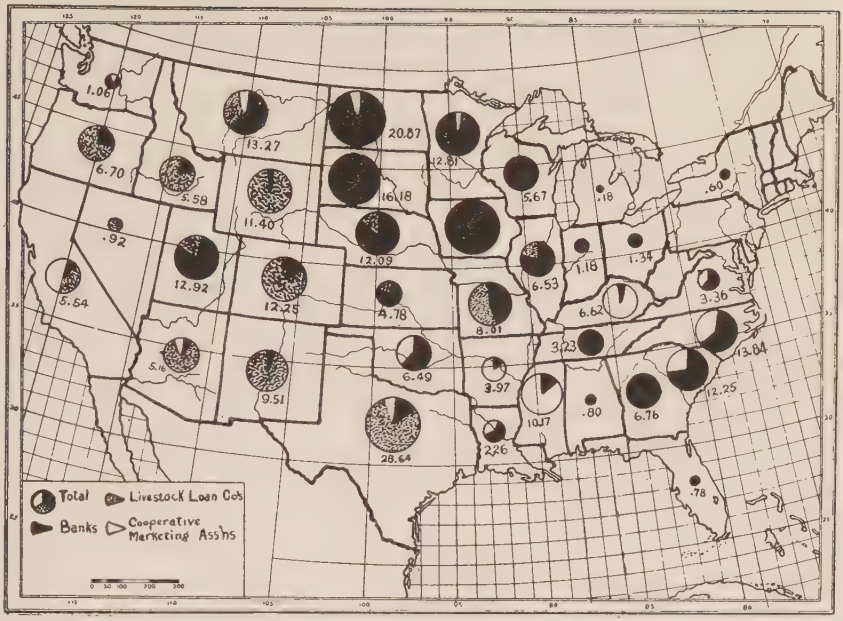

Fig. 25.—The War Finance Corporation helped relieve the credit stringency in farming regions hardest hit during the depression. Over 94 percent of its advances for all agricultural purposes were made west of the Mississippi River and south of the Potomac. From the yearbook of the Department of Agriculture, 1924. Farm credit, page 232.

ver; Limon Cattle Loan Company, Limon; Neal and Pauls Corporation, Meeker; Norwood Cattle Loan Company, Norwood; Rocky Ford Cattle Loan Company; Stockmen's Investment Company, Walden; Sutton Land and Cattle Company, Ernest and Cranmer Building, Denver; Wallace Live Stock Loan Company, Monte Vista; Western Live Stock Loan Company, Central Savings Bank Building, Denver.

What the War Finance Corporation Accomplished

Handicapped by the fact that it was an emergency organization, the corporation undoubtedly lifted a heavy load off the shoulders of many bankers and stock raisers and gave them time to adjust their business to new conditions.

The comments in the fifth annual report of the corporation give a vivid picture of conditions as they were in 1921-22. Stockmen had no money to operate, the banks were overloaded with agricultural paper, and not only could not increase their loans, but were under the necessity of calling in more loans. Often the banks held second mortgages on stock cattle, the sale of which would not have paid the first mortgage held by a cattle-loan company. Not only were prices

low but enforced liquidation would have forced them to still lower levels. The confidence created by the $1,000,000,000 fund at the disposal of the War Finance Corporation was of value in keeping up prices of farm products from going still lower.

Intermediate Credit

The difficulties of the cattlemen in 1920-24 revealed the need of a more satisfactory system for handling cattle loans. Commercial credit for periods under 6 months had been provided for thru the Federal Reserve Act, and land-mortgage credit for periods from 5 to 36 years had been similarly helped by the Federal Farm Loan system. Neither type of credit was satisfactory to the cattleman. Breeding cattle can not be handled satisfactorily on 6-month loans. The experience gained with the War Finance Corporation was of considerable value in drafting the Agricultural Credits Act, known as the Intermediate Credit Act. This act was passed in the closing days of the 67th congress, March 4, 1923. The new federal intermediate credit banks were to be placed, one in each of the 12 federal land bank districts. By this arrangement it was possible to make use of part of the equipment and personnel of the Federal Farm Loan System.[91] Charters for these intermediate credit banks were issued by the Federal Farm Loan Board.

The clause of greatest interest to livestock men was Section 202 which give the federal intermediate credit banks the power:

> "To discount for, or purchase from, any national bank, or state bank, trust company, agricultural credit corporation, incorporated livestock loan company, savings institution, co-operative bank, co-operative credit or marketing association of agricultural producers, organized under the laws of any state, and or any other Federal intermediate credit bank, with its indorsement, any note, draft, bill of exchange, debenture, or other such obligation the proceeds of which have been advanced or used in the first instance for any agricultural purpose or for raising, breeding, fattening, or marketing of livestock."

The following shows the cattle loans and other livestock loans made by The Federal Intermediate Credit Bank of Wichita:

Year	Cattle	Other livestock
1923	$ 345,303.64	$ 99,261.09
1924	4,379,871.16	297,881.28
1925	697,005.47	141,731.33
1926	779,364.99	148,578.41
	$6,201,545.26	$687,452.11

The Source of Funds.—The intermediate credit banks raise money by the issue and sale of collateral trust debentures, having a maturity at time of issue of not over 5 years. These debentures may be issued up to 10 times the paid-up capital and surplus of the bank.

The original capital of each bank consisted of $5,000,000 subscribed by the government of the United States. The intermediate credit banks are liable for the full payment of all these debentures issued by these banks, or for any interest remaining unpaid in consequence of default of any one intermediate credit bank. That is to say, the full strength of the whole intermediate credit system is back of every debenture issued by any individual intermediate credit bank. This makes these debentures an extremely safe investment and they are rapidly bought in at a low rate of interest.[93]

Rates of Discount and Interest.—The rate of discount is to be not more than 1 percent above the rate borne by its last issue of debentures. Rates of interest were originally allowed a spread of 1½ percent above the rate of discount. That is, if the debentures are taken by investors at 4½ percent, the rate of discount would be not more than 5½ percent to a bank or loan company on good agricultural paper. The interest rate (charged the borrower) would then be not over 7 percent, that is 1½ percent above the discount rate. On certain livestock loans this spread between discount and interest rates may be increased to 2 and 2½ percent.

> "The Federal intermediate credit banks now, in most cases, rediscount agricultural paper at a rate of 4½ percent, as compared with a rate of 4¾ percent a year ago, and this lower rate promises soon to be in effect for each of the 12 banks in this group. This reduces the upper limit of rates to the farmer, on loans thus discounted, from 6¾ to 6½ percent on general loans and from 7¼ to 7 percent on livestock loans. From The Agricultural Outlook for 1928.

Sizes of Loans.—Loans on livestock secured by chattel mortgages and discounted by a cooperative association are limited to 75 percent of the market value. Banks and trust companies cannot make loans larger than the limits imposed upon them by state or national laws, or in absence of other limitations, they cannot be more than 20 percent of the unimpaired capital and surplus of the bank or loan company. With notes secured by a chattel mortgage on livestock, the limit is 50 percent of the capital and surplus of the rediscounting corporation.

National Agricultural-Credit Corporations.—To provide for rediscount corporations organized for profit, the act provides for national agricultural-credit corporations, organized for a period of 50 years. These corporations are subject to the authority of the Comptroller of the Currency, can issue debentures which are not tax exempt, and can discount stated kinds of agricultural and livestock paper up to 10 times their paid-in and unimpaired capital and surplus. The capital of such a national agricultural-credit corporation must be at least $250,000.[94]

National Agricultural Rediscount Corporations.—National agricultural rediscount corporations provided for in the act must have an authorized capital stock of $1,000,000 or over. They are under the control of the Comptroller of the Currency, and have the right to rediscount agricultural paper for banks or trust companies (members of federal reserve), livestock-loan companies and agricultural-credit corporations handling agricultural paper such as described in the act.

Comments on the Intermediate Credit System.—One of the most frequent questions asked is: Why do not the intermediate credit banks loan directly to stockmen? A former vice president of the intermediate credit bank at Wichita answers as follows:[95]

> "On small loans usually classified as barnyard loans, it would be out of the question to attempt to function over four states and handle these small loans. The expense would be entirely out of proportion to the service rendered. They should come thru a rediscount agency. Suggestions have been made that larger loans, as from $10,000 up, might be made directly to the borrower. I am not sure that loans as small as $10,000 could be successfully handled direct without undue expense. The larger loans might be handled very satisfactorily as direct loans. We have numerous loans in amounts around $100,000 each. These loans are of a size sufficient to warrant our giving personal attention. Those needing these large loans have considerable difficulty in finding a discount agency with a capital stock sufficiently large to make and rediscount the paper, as the law does not permit any loan in excess of 50 percent of the capital stock of the discount agency."

One criticism is that the banks do not need the facilities of the intermediate credit banks, that they can give similar service to stockmen with less trouble, and that a man with sufficiently good credit to borrow thru the intermediate credit system, can get all the credit he wants at his local bank. Many banks are able to give as good service to the stockman as can the intermediate credit banks and the same is true of the cattle-loan companies and commission companies to a certain degree. The intermediate credit banks were intended to relieve the banks of their excess cattle paper, not to compete with them. They can, however, be of greater assistance to banks with small capital and should be able to discount loans at a lower rate of interest than can the banks, and also make these loans for longer periods of time than the banks can do.

A pertinent inquiry relates to the length of the loan period allowed by the intermediate credit banks: Why do loans have to be renewed every 9 to 12 months when the original plan was to allow the stockman 2 or 3-year loans on breeding stock, and what assurance do stockmen have that their 9-month loans will be extended?

Intermediate-credit-bank officials state that the nature of the security on livestock loans is such as to require inspection and renewal every 6 to 9 months. They say that the intermediate credit banks have never called in loans abruptly and that they have always extended or renewed where security was maintained.

How an efficient local cattle-loan agency can speed up loans is described by a Colorado banker in the following letter:[96]

> "A man goes into a bank, and he perhaps has 500 head of cattle, and he wants to buy 500 more, and put up 1,000 head as security. If he does business with the Federal intermediate credit bank or one of their agencies, it will be six weeks before the deal is closd. In the meantime some other stockman comes in and closes the deal and pays that afternoon. On the other hand the (Blank) Cattle Loan Company with a paid-up capital of $50,000, which is carried as liquid resources, does business with the Federal intermediate credit bank to considerable advantage. When their customer comes in as above, they advance him money to buy his 500 head, and when the inspector for the Federal intermediate credit bank comes in the cattle-loan company is financially able to carry the loan until the red tape can be wound up and the intermediate credit system can make the advance."

Why Loan Companies Do Not Use the Intermediate Credit System.—Cattle-loan-company officials claim there is no incentive for a loan company or bank to use the intermediate credit system on account of the restrictions on loans and interest. The following calculation made by a man connected with one of the largest cattle-loan companies shows the effect of the 1½ percent limit on interest spread, and of the 10 percent ratio between capital and loans.

Table 10.—Income of a Cattle Loan Company with $100,000 Capital.

	With Intermediate Credit Restrictions	Without Restrictions
Capital stock	$100,000	$100,000
Ratio of loans to capital	10 to 1	20 to 1
Possible loans	$1,000,000	$2,000,000
Margin on interest	1½ to 2 percent	2½ percent and over
Income on margin	$15,000 to $20,000	$50,000

The cattle-loan companies say that they cannot afford to handle $1,000,000 in loans, hire competent managers, office help and inspectors for less than $15,000 a year. A gross income of $20,000, no losses being considered, would leave only $5,000 net income or 5 percent interest on the capital invested. This is no more than might be made by investing the money in good bonds, with none of the worry of running a business, and less risk of loss. As one cattle-loan man says:

> "A moderate line of loans for a company that would be organized under this law would be $4,000,000, and it is not good business to risk endorsing and handling that much paper for $20,000 profit."

How Can Bankers Make Best Use of the Intermediate Credit System?—If bankers wish to do so the plan followed at Limon, Colorado, appears to be satisfactory. The First National Bank of Limon, together with two other banks, organized a local corporation to handle livestock loans thru the Intermediate Credit Bank. The president of the Limon bank has been able to handle the work of the corporation at a cost of about ½ percent for inspection and 1½ percent for his own services. He writes:

> "We have had good service from the Intermediate Credit Bank, but on account of there being only two or three such organizations in the state, we are sometimes a trifle handicapped in getting inspectors."

L. B. Myers, formerly vice-president of the Wichita Intermediate Credit Bank writes as follows:[97]

> "The majority of corporations organized for this purpose and doing business with this bank are corporations of $10,000 capital stock. We require that this stock be hypothecated with this bank as a marginal security to protect their endorsement on the paper rediscounted with us. It must be invested in securities eligible for rediscount with this bank, and should earn not less than 7½ per cent. or $750 per year. The corporation has a rediscount capacity of ten times its capital stock so that a $10,000 corporation would have $100,000 upon which it would be entitled to a spread of 2½ per cent. or $2,500, making a maximum income of $3,250. On this the taxes would be possibly $250, leaving a net maximum income of $3,000.
>
> "Taking it for granted that the manager of the company has other employment, and does not give his entire time to this business, he should be employed for perhaps $125 per month or $1,500 per year, leaving a net income of $1,500 or 15 percent on the capital stock, taking it for granted that no losses are incurred. This, of course, is the maximum figure, and where the rediscounts are less than the maximum, the earnings would be correspondingly reduced. There would, however, be no occasion for loss on the capital stock investment unless bad loans are made. This requirement is necessary only in companies not having sufficient capital to function without the requirement that their borrowers take, say, 10 per cent. of their loan for the purpose of increasing their capital stock."

Too much emphasis cannot be laid on the importance of an experienced man as manager, tho he may need to devote only part of his time to the work. There is no magic in co-operation. Good management and safe loans will alone make such an organization a success.

The chief purpose of the intermediate credit system is to afford stockmen a chance to get a start. A comment by Herbert Myrick is worth remembering:[98]

> "Not to get yourself into debt, but help to get yourself out of debt, is the purpose in view."

Co-operation helps not only oneself but others.

A Study of Range-Cattle Financing in the North Park Area in Colorado

In selecting a field for the study of the cattlemen's financial situation, the North Park area (Jackson County, Colorado) with the counties adjacent on the west and south, appeared to be the most suitable. These counties, Jackson, Routt, Rio Blanco, Eagle, Garfield and Grand, are largely mountainous or bordered by mountains, are adjacent to national forests and well adapted to the raising of beef cattle.

North Park contains 1,044,480 acres, the surface is level to rolling, rising gradually to the surrounding mountains. The altitude in the valley is between 8,000 to 9,000 feet. The park was discovered by John C. Fremont in 1844 and was formerly known as the Buffalo Pasture because of the large herds of buffalo that grazed there.[99] The summers are short and the winters severe, but the soil is fertile and the native hay from the meadows sells at a premium. The use of the park as a grazing center began in the winter of 1879 when some stockmen from Laramie, Wyoming, kept some cattle there thru the winter.[100] Feeder cattle from this district have been well known for years as of superior type and quality.

Fig. 26.—North Park (Jackson County), Colorado, north of Walden, showing range land, hay meadows and mountain ranges.

Three general features combine to make Jackson County a specialized cattle country. The short summer season makes ordinary crop farming precarious. The native hay of the park makes an excellent winter feed for cattle. Lack of transportation facilities has greatly retarded the development of the county. One railroad comes into the park thru Wyoming over Medicine Bow Pass, a mixed train going in one day and back the next, three times a week. Only 22 percent of the land is cultivated and the remaining grazing land is used almost entirely for cattle. The mountains surrounding the county are all in forest reserves, the Colorado National Forest on the east, the Routt National Forest on the west and the Arapahoe Forest to the south along the Rabbit Ear range. The grazing rights on these forest reserves are held largely by cattlemen.

As shown in Table 11, Jackson County has a large proportion of beef cattle to population and the ranches are of large size. The ratio of mortgage debt to farm value and the total debt per mortgaged ranch is high.

Table 11—Mortgage Debt per Farm and Ratio of Beef Cattle to Population in 1920.[101]

	Beef cattle, 1920	Beef cattle per capita	Average* mortgage debt	Ratio of debt to value
United States	35,238,100	.3	$ 3,356	29.1 percent
Mountain states	7,599,689	2.3	3,824	30.5 percent
Colorado	1,756,616	1.9	3,980	29.6 percent
Jackson Co., Colo.	44,156	33.0	11,949	37.6 percent

*Average of mortgaged farms worked by owner.

In 1924 it was evident that North Park cattlemen were in a serious condition financially. Of the two banks in the county, one, the North Park Bank, closed on May 28, 1924. The remaining bank, the First National, was moved to Cheyenne, Wyoming, and was liquidated thru the Stockgrowers' National Bank, January 31, 1925.

To get information on the financial situation in this North Park area and adjoining districts, a questionnaire was sent to 609 cattlemen who had held grazing permits for cattle on the Colorado, Arapahoe, Routt and White River National Forests. To this questionnaire 132 replies were received, or over 20 percent, which was a reasonably good return.

Number of Cattle Owned.—The herds reported varied in size from 7 to 5,500. Owners reporting no loans had the smaller herds averaging 207 head. Those reporting loans had herds averaging 439 head. In some cases the herds had been cut down materially at the

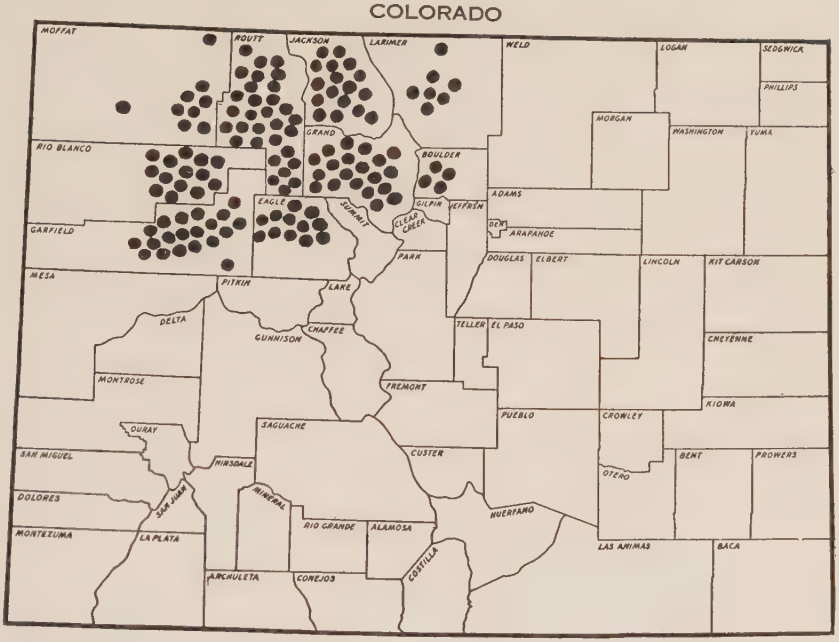

Fig. 27.—Map of Colorado showing distribution by counties of stockmen replying to questionnaire in 1925.

time of answering the questionnaire, so that the returns do not show the full size of herds when the loans were made.

Size of Loans.—Ninety-seven loans reported ranged from small bank loans of $300 to $400 to one of over half a million dollars ($564,000). The average loan was $24,578. If we omit the 2 largest loans, the average of the remaining 96 is $17,288, which is more nearly representative.

Table 12.—Distribution of Loans by Size from 97 Ranches Reporting, Colorado, 1925.

Size of loans	Number of loans	Average interest rate
Under $5,000	44	8.4
$ 5,001-$ 10,000	12	8.2
10,001- 15,000	8	8.1
15,001- 20,000	10	7.9
20,001- 25,000	4	7.2
25,001- 30,000	5	7.7
30,001- 35,000	2	8.4
35,001- 40,000		....
40,001- 45,000	2	8.0
50,001- 100,000	5	7.6
100,001- 150,000	3	7.8
150,001 and over	2	6.2
	97	

Table 13.—Distribution of Money Loaned Classified by Size of Loans, 97 Ranches Reporting, 1925.

	Total loaned	Percentage of total	Number of loans
Over $150,000	$ 749,000	31.3	2
$100,001- 150,000	435,000	18.2	3
50,001- 100,000	331,760	13.4	5
40,001- 45,000	90,000	3.8	2
35,001- 40,000	.....	....	..
30,001- 35,000	70,000	2.9	2
25,001- 30,000	146,000	6.1	5
20,001- 25,000	96,000	4.0	4
15,001- 20,000	176,566	7.4	10
10,001- 15,000	99,200	4.2	8
5,000- 10,000	99,900	4.2	12
5,000 and less	107,305	4.5	44
	$2,400,731	100.0	97

While the smaller loans (under $5,000) made up over 45 percent of the total number of loans, this group received only 4.5 percent of the total credit extended. On the other hand, 10 borrowers (10.3 percent) obtained $1,515,760 or nearly 63 percent of all the credit reported. Of the 7 foreclosures reported, 3 were on farms included in this group of 10 and account for 93.8 percent of the total amount reported as foreclosed.

Sources of Credit.—Table 14 shows the sources from which loans were obtained. Where the replies given were not sufficiently clear the loans have been classed as unspecified. Banks are thus shown to have made most of the loans. Some of these loans may have been discounted later by cattle-loan companies.

Table 14.—Sources of Loans, Northwestern Colorado, 1925, 97 Ranches.

	Total Loaned
Private loans	237,896
Cattle-loan companies	233,260
War Finance Corporation	164,000
Land banks	163,300
Mortgage companies	109,100
Unspecified	257,564
	$2,400,731

The large amount of private loans may have been due to former owners taking notes in part payment for land or cattle sold.

Interest Rates as Affected by Class of Security.—The loans have been classified below according to kind of security, land, land and cattle, cattle, general loans and personal notes. Some reported several loans, making the total loans 116. Where two interest rates were quoted, land and cattle both being given as security to one creditor, but with no specific part of the loan assigned to each, the loans were classed under land and cattle, and interest rates averaged. If the amounts loaned separately on land and cattle were specified, each part was considered as a separate loan.

Table 15.—Rate of Interest as Related to Class of Security, Colorado, 1925, 97 Ranches.

No. of loans	Class of security	Average rate of interest	Average size of loan
28	Land only	6.6	$11,021
13	Land and cattle	8.0*	19,517
28	General loans**	7.9	38,359
29	Cattle only	8.4	8,576
18	Personal notes	8.8	2,582

*Does not include the $564,000 loan at 6 percent. With this loan included the average is 6.6 percent.

**Includes all loans not clearly specified in other divisions.

Cattle were included as security generally from 50 percent to 75 percent of the face value of the indebtedness. Other collateral included land, personal notes and chattels.*

*Owing to incomplete returns on some questionnaires, the above classification must be considered as only approximately correct. Where two rates were quoted on one class of security the average of the two has been taken for purposes of tabulation.

Rate of Interest as Related to Size of Loans.—The rate of interest normally decreases as the size of the loan increases. Table 17. The decrease was not regular, however, some of the larger loans ($30,000 to $50,000) showing a higher rate than those from $20,000 to $30,000. With only a small number of loans in these groups, this discrepancy is not significant. Interest on the largest loans averaged 6.2 percent and on the smaller loans (below $5,000), 8.4 percent.

Financing in Four Great Plains States.—Wilcox, Klemmedson and McComas included information on rates of interest in their recent survey of 315 cattle ranches in the states of Montana, Wyoming, North Dakota and South Dakota. A summary of their findings is given here for comparison.

Table 16.—Debt per Ranch and Rates of Interest, 315 Ranches in Great Plains States.[102]

	Average debt	Rate of interest
Total debt per ranch	$8,543	7.4
a. On real estate	3,789	6.8
b. On livestock	4,337	7.9

Table 17.—Average Size and Source of Cattle Loans, 315 Ranches in Great Plains States.[102]

	Number of loans	Interest rate	Average loan	Percentage of total loans
Local banks	126	8.6	$ 6,343	57.3
Cattle-loan company	10	6.9	16,420	11.8
War Finance	12	6.6	14,701	12.6
Intermediate credit	14	7.0	7,632	7.7
Private loan	18	7.5	5,204	6.7
Unclassified	16	8.0	3,241	3.7
U. S. Land Bank	1	7.0	2,875	.2

Foreclosures.—Of 97 cattlemen replying to the questionnaire only 7 reported foreclosures, but these 7 had a total indebtedness of $722,360. Over two-thirds of this, however, was in one loan, the remaining 6 averaging over $26,300 each. There did not appear to have been any unreasonable action in taking over such herds or ranches.

An informal survey in the summer of 1925 showed a list of 30 or more recent foreclosures in Jackson county. Some ranchmen had "walked out" leaving their ranches in the hands of their creditors. A few expected to redeem their property within the limit of time provided by law and were still working on their respective ranches. Others, it was expected, would bid in their farms when offered for sale.

The general disposition of the creditors was evidently to let the loans "ride" where there was any chance of payment. Often the loan was more than the value of the collateral and creditors were not anxious to take over the management of ranches that were losing money. Wherever a credit agency had to choose between foreclosure on its loans or bankruptcy for itself, it was naturally anxious to get in what it could.

What Some Cattlemen Reported on the Situation

The following extracts are from letters written on the backs of the questionnaire sheet. Many who are not quoted here report having to sell good stock at low prices to pay interest or running expenses, but few criticise their creditors.

Cattle Business not Paying.—One of the most evident conclusions of the stockmen was that the trouble was with the cattle business itself and not with the financing agencies.

A. "Cattle have been losing money for the last 6 years. Have reduced my cattle loan by money from other sources. There is nothing but grief in the production of cattle."

B. "Have shipped cattle that ought not to have been sold at all in order to pay interest. Got but little for them. Trying to hang on, but am almost ready to walk out. Have lost a great pile the last 7 years."

C. "Cattle have been a losing proposition for the last four or five years. When calves that cost $20 to $25 at weaning time will only bring $11 or $12 it is time to quit. It has ruined me like a lot of others. Five years ago I had a good ranch worth $35,000 to $40,000 and all clear, now I have nothing but debts."

D. "Sold all my cattle last fall, the fatal week of November 13, 1924. I was not forced to sell, just got tired hanging on. I am working for wages now and have rented the ranch for $400."

E. "I sold four-year-old steers on the market and they only brought seven dollars a head more than I paid for them as yearlings. Lost my ranch and sheep."

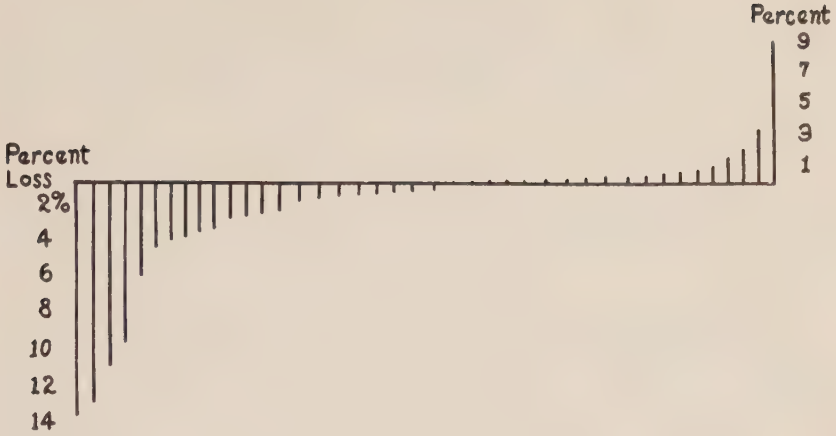

Fig. 28.—Profits and losses on 40 Texas cattle ranches in 1923. (Klemmedson and Parr, U. S. D. A.) Compare with Figs. 29 and 30. Percentage of profits shown above line at right.

Need a Better Loan System.—Several considered the present methods of making loans unsatisfactory. Probably no system of financing would have proved satisfactory thru the period of depression. The comments are of interest in that they point out some of the faults of existing financing agencies as stockmen see them.

F. "I haven't gone back into the cattle business for several different reasons. One is that it is too slow a business to run on borrowed money, when you can only get short-time loans and pay 8 and 10 per cent. interest. It takes three years at least before you begin to get any returns and if your loans come due before that time, away goes your business."

G. "I haven't been able to borrow money long enough in one place to get ahead with my business. If I could get a Government loan and not have to pay interest too often, I could pay for my home and cattle. My time is up on the land next spring, and I don't know if I can get any more time. If I can't, I will have to give up and ship my cattle next fall. What has been keeping me down is having to sell cattle at half price to pay interest."

H. "The principal reason the cattle business is bad is that the cattlemen cannot do business on these six-month loans. If we had from two to three years' time we would be all right. I have known a number who have gone under that would have been O. K. if they had not been forced to sell on a bad market."

I. "The ———— Co. called my cattle and horse loan in September, 1925. Had to ship on the October market when the market was glutted with cattle, consequently they brought $20.54 per head. I had 1,000 tons of hay in stack, which I was willing to put into the stock, but they did not give me time to negotiate a new loan. Shipped 550 head of cattle and horses. Cattle would have brought $40 a head this spring."

J. "I have lost $25,000 and my time in the cattle business since 1919, and I have been in this county 40 years in cattle. A cattle breeder cannot do any good on 6-month money. When cattle are low and feed high, the banks make you ship, and if cattle are high and feed low the banks want you to hold them, and they can make you do as they like on 6-month loans."

K. "The crying need of all this cattle country is longer-time loans at a lower rate of interest. The only reason fifty percent of the cattlemen are willing to stay in the business is the expectation that cattle may rise in value and they will be able to look the world in the face again."

These Men Believe Creditors Are Reasonable.—

L. "I haven't known but three cases where growers were told to 'bring 'em in,' but there have been lots of cases over in North Park and farther west of here. It was three or four years, however, before these orders were given. (Routt county cattleman.)"

M. "Have never been forced to sell cattle, but have sold at a loss for five years. Our bank has been very obliging and accommodating. Some of the companies are hard boiled and show no mercy if you are behind with your interest."

High Interest Rates.—

N. "We will have to sell everything this fall as the banks are closing on us as fast as the purchasing power of the community will permit. We cannot meet our obligations on high taxes and 10 percent interest, and there is no relief in sight. Most of us will have to hunt a job to make a living. I have been on this land for 25 years and was rated before the war at $15,000. I think I can yet outstay most of my neighbors, but the country as a whole will have to turn to the tenant system. It is all we can do to hold our own. I thought a private loan would be better than a Federal loan as a small ranchman has only a yearly income, and by not paying the government promptly they have foreclosed quicker than a private individual. It is almost impossible to pay 8 percent or to pay off the $3,000. I have to sacrifice the young stock to pay the interest and keep from compounding it."

O. "Heavy winter loss coupled with original high price of cattle, expensive feed bills and high interest proved our downfall. Cattle costing us $75 were sold for $40 because we had to liquidate."

P. "I settled in this valley in 1913, kept 200 to 400 head of cattle and made money every year up to 1920. I have lost money on every cow critter I have handled since then, which loss is due to high rates of interest, high wages and increased expenses. If the banks should foreclose at this time as they are liable to do, nine out of every ten ranchmen would be absolutely broke."

A Lender's Viewpoint.—The borrower is not the only one to worry.

Q. "I sold my ranch in 1919, did not get any payment. Got mortgage on 14 head of cattle and realized on 9 head of them. Yes, I took

back the ranch and what was left of the stock. My buyer would not work and a man cannot pay interest if he won't work. The worst losses have come from selling stuff that was good to keep, but that the market didn't want. Lots of good men need extended credit on low interest, but it must be conservative."

Conservative Buying and Diversification.—

R. "Have been forced to sell cattle at a loss for last five years. Cost of production did not leave us a meal ticket. Bought 1200 breeding ewes that bid fair to make us a little money."

S. "I bought 320 acres in 1915, $3,000 down and a mortgage for $2,000, paid it off December 30, 1923. Bought 30 head of cattle December 30, 1922, for $1,250 at 10 per cent., paid it all off December 30, 1923. Do not owe anybody a cent, and if my foot doesn't slip, am going to stay that way."

Bankers and Stockmen Misled by High Prices in 1919.—One cause of disaster was the failure to foresee the impending drop from wartime prices, in view of the reduction in exports. Bankers and stockmen as well as cornbelt farmers were misled by the boom of 1919 and thought we had entered on a permanently high level of prices. A cattle-loan-company official in Chicago reported that a group of bankers was planning, in 1920, to pay $100 each for 10,000 range cows to put on an Indian reservation, where good grazing land was available for lease at a low figure. In spite of the fact that the

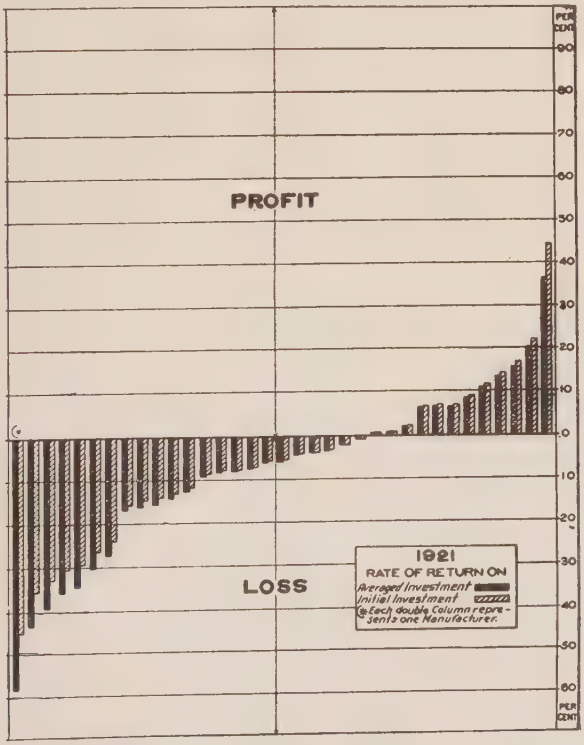

Fig. 29.—Profits and losses of manufacturers of washing machines in 1921, expressed as percentage of average and initial investment. Compare this with Fig. 28. Stockmen were not the only ones injured by deflation. From Report of Federal Trade Commission.

price decline had already begun they were, with difficulty, persuaded that it would be unwise to make the investment. In a few weeks, prices fell rapidly and the investors saved their $1,000,000.

Lack of Care in Making Loans.—Some of the cattlemen humorously picture the loan agents as following the stockman up and down the range at one period begging him to take loans and a few months later following him to get their money back. While this is partly an exaggeration, it was partially true and some of the loans were made to parties not well qualified to handle cattle.[103]

Buying steers for grazing is a speculative business at the best and was especially risky at this period.

One man reported that he had been milking cows and selling eggs and prospering reasonably well on a small ranch. He bought 400 head of steers at $90 each to run on the forest reserve ($36,000) and lost his whole ranch. Another bought steers at around $75 each and sold them later at less than $25. One bought 2,990 acres of land at $40 an acre, paid all but $65,000, then lost everything.

There is nothing particularly new in these stories as they could be duplicated many times over in all agricultural sections of America. Land was overvalued in the North Park area as elsewhere. One man bought 2,000 acres at $25 an acre, paying $5 an acre down ($10,000) and giving a mortgage on the balance ($40,000). When prices fell he could not pay interest and the mortgage company which had to close him out finally was said to have accepted $10 an acre for the land.

Reports from Colorado Bankers

A questionnaire was sent to 387 Colorado banks in 1925, asking for information on various matters relating to the financing of the cattlemen. Replies were received from 186 banks. Of this number, 118 were making cattle loans. Since the bankers were asked to give approximate figures only, the following table is correct only in a general sense. Some questionnaires were not fully answered. Statistics on the capitalization of these banks and on their total loans are from Rand McNally's Bank Directory, January, 1925.

Table 18.—Loans Made to Cattlemen with Cattle as Entire or Partial Security Compared to Total Loans, 186 Colorado Banks Reporting, 1925.

	Reporting cattle loans	Reporting no cattle loans	Total or average
Number of banks	118	68	186
Total capital	$ 5,011,000	$ 6,642,000	$11,653,000
Average capital	42,466	97,682	62,650
Total loans	36,716,470	52,408,430	89,124,900
Cattle loans	6,357,400		6,357,400
Percentage cattle loans	17.3		7.1

Security on Cattle Loans.—Most banks make loans up to 50 percent of the value of the cattle with a chattel mortgage on the cattle only. For loans above this point, additional security is taken on feed, horses or other chattels. Land is generally included as security on the larger loans. Those whose credit is unquestioned can get loans on personal notes.

Out of 106 replies regarding the nature of the security on loans, 74 indicated that other security was taken, depending on circumstances, 27 reported straight cattle loans only, and 5 mentioned cattle and feed only. Some of the comments made were as follows:

> "We handle them all ways; on cattle, horses, farm equipment, crops, and some land." "We accommodate our people any way they desire, so long as we feel safe." "When borrower is in good financial condition and good moral risk we ask personal note only." "Anything from chickens to cattle and land" was another remark. "Whether the ranch itself was clear of encumbrance" was another factor mentioned.

Interest Rates.—No great variation was noted in interest rates. The legal rate of interest in Colorado is 8 percent with higher rates permissible by contract. No rate was mentioned above 10 percent and only a few below 8 percent. A distribution of the interest rates by counties shows a tendency to higher rates in the outlying parts of the state. Counties close to the financial centers show the lowest interest rates. See page 41. Four banks that rediscounted cattle paper quoted rates below 8 percent. One bank quoted 7 to 8 percent on both breeding and feeder-cattle loans. Seven reported rates below 8 percent on feeder cattle. Fifty-four reported 8 percent interest, 21 reported 8 to 10 percent, 10 reported 9 percent and 39 reported 10 percent interest.

Forty-nine banks reported that they discounted part of their cattle paper. Amounts discounted ranged from 10 percent or "a few" loans up to 80 percent and more, but a great majority discounted only 20 percent to 25 percent of their cattle paper. Forty-two banks reported the agencies thru which they discounted their cattle paper. Twenty-eight mentioned correspondent banks, 7 the federal reserve banks, 4 discounted with cattle-loan companies, 2 with the intermediate credit banks and 1 the War Finance Corporation.

Foreclosures.—Of 118 banks making loans on cattle, 40 banks reported a total of 100 foreclosures, including some that "walked out." Four banks reported 5 foreclosures each, one reported 6, one 8 and one bank had 10 foreclosures. The remainder had 1

or 2 foreclosures, or occasionally 3. Only a "few bankrupts and a few crooks" was the remark of one banker, while another comments, "5—due to absolute dishonesty."

One banker writes on foreclosures as follows:

> "We have never foreclosed on any cattlemen for inability to pay their loans. In the past five years, we have taken over two, that would not furnish us with a proper check and when our own check was made we discovered that they were disposing of cattle in some way; in other words, they were crooks and there was nothing left for us to do. We have never foreclosed on any man doing his best and playing square."

Banks and the Intermediate Credit System.—In 1925, when this study was being made, the intermediate credit system had not attracted much favor from the bankers. Many of them claimed it was not needed, others were prejudiced because of experiences with the War Finance Corporation. The following comments are interesting in that they show the viewpoint of some and point to some of the features most likely to arouse criticism of the intermediate credit banks.

> A. "We have not tried to avail ourselves with the facilities of the Intermediate Credits act. We found the War Finance Corporation too slow in acting and too expensive to the borrower. This may have been the fault of the Corporation thru whom we operated. We have lost $2,000 thru our efforts to help the cattlemen and may lose more yet. I always held that local inspectors would have furnished better and more accurate records with much less expense; besides, the borrowers resented these numerous checkings by strangers unknown to them, and at times that was unfavorable for the handling of cattle."

> C. "I have never favored any artificial means of financing. I am just as firmly convinced today as I have ever been that legitimate banking consists of making loans to farmers and stockmen in your own neighborhood, when their statements and reputation warrant it."

> D. "Easier to handle loans thru our city correspondents."

> E. "We do not need new credit, what we need is better marketing conditions and better prices for stock cattle."

> F. "We don't need any credit schemes. Farmers and cattlemen that have anything can get all the money they need, and those that have nothing cannot expect much credit.

> "I am opposed to any scheme that will increase production of either farm crops or livestock at present time. Over-production is the cause of 90 percent of our trouble right now.

> "Liberal credit and easy money causes over-production."

Conclusions

In the foregoing pages the writer has tried to gather together some facts about financing the western cattle business during the past half century. The reader may draw his own conclusions. An attempt has been made to answer only a few of the leading questions which have been raised since 1919. The validity of these answers will have to be tested by time and experience.

The problem of the past few years was that of emergency financing. Cattlemen who had been in the business for half a lifetime had to be kept going until they could regain their equilibrium after the events of 1920. Few were interested in starting new herds for none were needed. With the passing of the emergency there is now a renewed interest in cattle raising. Young men who have experience in handling cattle, but who have little capital, are likely to be interested in any means whereby they might be enabled to start for themselves without having to pay too high interest rates.

The beef industry cannot expect any favors in the way of financing other than can be granted to any other industry. Investors cannot be expected to risk their capital where the investment will not be safe or where the rate of interest is not equal to that which could be obtained elsewhere. One object in the establishment of the intermediate credit system has been to assist an unorganized industry like the beef industry to finance itself on a basis that will be satisfactory to both creditors and debtors.

Can Interest Rates Be Reduced?—Commercial interest rates are a combination of three factors: Basic interest or payment for use of capital; insurance or payment for risk; and commission charge or payment for services. Reduction of the basic interest rate is only possible thru increased saving and decreased borrowing.

Increasing the safety of loans will reduce the amount necessary to cover risk. Time will restore confidence in cattle loans. Conservative credit and careful supervision and inspection will reduce risks. The intermediate credit system, by means of its method for sale of debentures offers the investor safe investment at a fair rate of interest. The cattleman should ultimately be the gainer by being enabled to borrow intermediate credit funds at a fair rate of interest.

That part of the interest charge, which covers service or handling costs cannot be reduced to such a point that the business will be unprofitable to the credit agency handling same. The merchandising of credit is a highly specialized business requiring well-trained and trustworthy officials of good executive ability who are

able to earn good money in other work. If the country banker who knows cattle wishes to be of greater service to stockmen than is possible within the limits of a small bank, he can help them in the establishment of a loan company to work thru the intermediate credit system. By doing such work on a part-time basis, the overhead cost on loans can be cut to a reasonable figure.

Need of Local Agencies and Local Control.—In a country as large as this where conditions and climate are so varied even within the confines of a single state, it is not satisfactory to have the agency upon which a man must depend for a loan, located several hundred miles away. There is not the close touch which gives the best chance to size up the borrower and his local conditions. It is this close touch that gives the local banker his important place in the credit machinery of the country. It was this lack of touch that was responsible for much of the criticism of the War Finance Corporation. The federal farm loan associations appear to be progressing under a system of local control, and local cattle-loan associations should likewise give good service under proper safeguards.

The success of any bank or loan company depends first of all on the integrity, ability and experience of the men in charge of making the loans. In forming loan companies to work in connection with the intermediate credit banks, only the best interests of the company and its members should govern the selection of the officials. "Red tape" is for the best interests of the borrower, as well as those of the investor. Its purpose is to protect the capital stock of the association and insure its value. The man who can get credit on his personal note may not need the loan association. It is the young man who is just starting in that needs financing. If he has stock in his own financing association he is more likely to see that unsafe men and unsafe loans are kept out.

The Co-operative Spirit Essential.—Co-operation is more than a label to be tacked on to the name of an organization. Co-operation is a spirit of brotherhood. A farmer was responsible for the definition, that "co-operation is getting myself so other folks can work with me." Co-operation in financial matters must develop in the local loan associations; it will not develop first at Washington or Wichita.

Labor was in a far worse condition a century ago than is the farmer now. But laboring men learned to stick together thru fair weather or foul, and now hold a stronger position than do farmers

in controlling their own destinies. The labor unions are running banks successfully and may, very possibly, take over other enterprises in the future.

Co-operative stockholding in loan associations should not be looked on as a hazardous venture. It has been tried and proved successful. Stock in the federal farm loan associations has been paying 6 percent dividends and more. Capital invested in local cattle-loan associations to borrow thru the intermediate credit banks should do as well with good management.

Term of Loans Should be Extended to Five Years.—It is the opinion of the writer that the term of loans in the intermediate credit system should be extended to from 3 to 5 years. The purpose of these banks as originally planned was to bridge the gap between the 6-month term of federal reserve paper and the minimum period of the federal land bank loans. Five years is not too long a time allowance to enable a man to pay for a herd of breeding cattle. It has been said that 3 years is the right length of time for a breeding-cattle loan, because that is the length of time required for producing a steer from the time of breeding till time of sale as a 2-year old. That, however, presupposes that a man can pay off his loan on a breeding herd from the sale of one crop of calves. He might do this on a rising scale of prices but not on a stationary or falling market. Loans might be paid off in three installments, at the end of the third, fourth, and fifth years respectively. To do this it may be necessary to amend the chattel-mortgage laws of the various states.

The borrower should not object if, with a 5-year-loan period, the loan should be made on a moderate and conservative basis. The breeding of cattle is not a short-time job, but a lifetime enterprise. Herds should not be bought full-sized but grown to full size. A man learns to handle a big herd or a big business by building it up from a small one.

The Raiffeissen co-operative banks in Germany operate successfully on a 10-year-loan period. Loans can be paid in installments thruout the whole period of the loan or in any shorter time desired. Wright[104] calls attention to the clause in the loan contracts of the Raiffeissen banks permitting the calling of loans, in case of fraud, on 4 weeks' notice, but notes that this has never been done and that loans run full time. If 10-year loans can be satisfactorily handled in Germany, a 5-year loan should not be considered unsafe here.

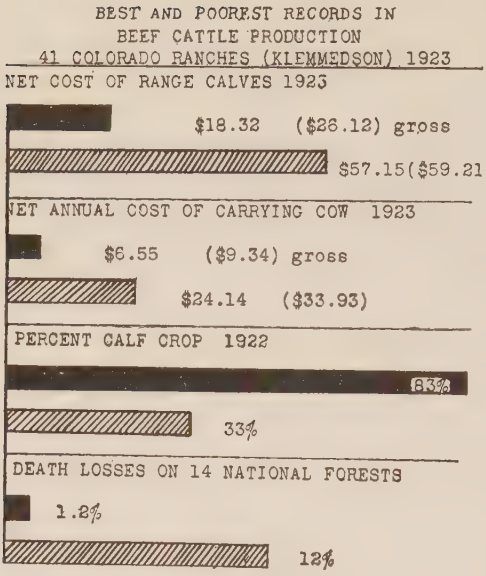

Fig. 30.—Why profits vary on cattle ranches. Best records compared to poorest records, 1922-1923, on 41 Colorado ranches.

Successful Financing Must be Based on Successful Cattle Raising.—When the cattle men are making good money they have little trouble in getting loans. If they are not making money, money will go elsewhere for investment. There is too wide a variation in the results obtained by different cattlemen in the same areas for all to be making money, even in normal times, and more credit will not help the man who is losing. As Herbert Myrick says:

"It should be emphasized that **more price** for farm products raised, and marketed at **less cost** is needed rather than **more credit** with which to raise and sell **more produce** at greater loss."

Some data secured by the U. S. Department of Agriculture on the cost of production of over 160,000 beef cattle show a wide difference in efficiency between some ranches and others.

Table 19.—Some Average Costs and Percentages on 41 Colorado Cattle Ranches with Comparison of Best and Poorest Records, 1922—22,285 Cows with Calves.[106]

	Best	Poorest	Average
Percentage turnover on capital			
17 prairie ranches	62.4	0.6	9
24 mountain ranches	20.6	4.7	13
*Gross annual cost of carrying cow			
17 prairie ranches	$10.83	$50.10	$20.51
24 mountain ranches	14.14	43.97	24.09
*Gross cost of range calves			
17 prairie ranches	19.46	82.69	36.66
24 mountain ranches	28.66	66.11	43.22
Percentage calf crop			
17 prairie ranches	83	23	56
24 mountain ranches	76	36	56.7

*Gross cost includes owner's labor, interest, depreciation, etc.

Table 20.—Average Costs and Percentages on 40 Texas Ranches with Comparison of Best and Poorest Records, 1923—65,458 Cows with Calves.[106]

	Best	Poorest	Average
Annual labor cost per cow	$ 1.41	$ 7.10	$ 2.51
Net annual cost per cow	10.79	27.77	19.05
Returns on capital investment	9%	14% loss	2.05% loss
Percentage calf crop	93	37	65
Net cost per calf	13.93	49.60	29.15
Death loss on calves	none	7.6%	1.7%

On 14 national forests the percentage of death loss varied from 1.2 percent to 12 percent. It is evident that a 12 percent[107] death loss on a herd or a 7.6 percent death loss on calves has a greater effect on ranch income than a difference of 2 percent in the interest rate, even if there is a $40 debt on each $40 animal. If calves are selling at $25 each, no new method of financing can aid the man whose costs are $50 per cow or $82 per calf produced.

The percentage calf crop has a direct relation to the cost per calf. On the above 40 Texas ranches, those ranches with a 90 percent calf crop or better had an average cost per calf of $22.15, while those with a 40 percent to 50 percent calf crop had a cost of $49.21 per calf. One large ranch foreclosed on in Colorado had an annual calf crop below 30 percent.

Fairbanks reports that taking bulls out of the herd in winter and feeding them before breeding season, increased the calf crop 31 percent on the Montezuma National Forest.[108] Better arrangement of watering systems greatly reduces the loss from bogging down. Feeding cutback steers and heifers before sale, showed a profit of $10 a head in the Texas ranches studied. Calves that were wintered well at a cost of $2 for extra feed, sold for $5 to $7.50 a head more in the spring. Running cattle under fence during breeding season increased calf crops 22.6 percent and reduced losses.

Many conditions which make for success in the cattle business are beyond the control of the individual. Such factors as freight rates, tariffs, foreign markets, taxes and public-land policies can be changed, if any change is possible, only by combined effort.

Conditions during 1921-1924 broke cattlemen and bankers alike without regard to good or bad management. Men of proved ability and experience in the cattle business lost all they had. Cattle-loan companies and banks were carried down with the cattlemen regardless of the ability of their managers. The agricultural depression was a national calamity, beyond the control of any one class or group of men.

Beef-cattle values began rising in 1927 to a point where the cattle business is likely to prove more profitable than at any time since 1914.

TURNOVER OF CAPITAL IN VARIOUS LINES OF BUSINESS

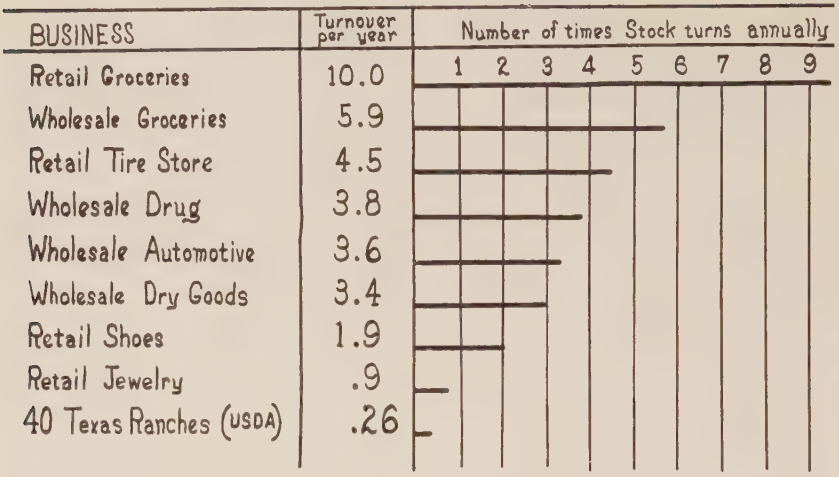

Fig. 31.—Why mercantile establishments can recover from depression more rapidly than can the stockman. When prices fall rapidly the retail storekeeper loses heavily as does the cattleman, but has an opportunity to buy in again at the lower levels and make a profit several times on succeeding turnovers. Texas ranches in 1923 had a turnover per year of 26 percent on money invested in cattle. This means a period of 4 years during which time they would be selling cattle at low prices which were produced at high-cost levels. From reports of the Harvard Bureau of Business Research with the exception of the last item.

Herds will probably be increased in size and new herds started. Overproduction and over-borrowing can cause trouble again, as in the past. Holding back more heifers and cows for breeding purposes now means less stock to go to market and therefore better market prices. But when all the increased produce of these extra cows begins to come to market the effect may be somewhat different.

If any of the foregoing history can be of value in preventing over-expansion in times of high profits it will have served a good purpose.

Acknowledgement

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